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<210> 4168

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4168

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<210> 4169

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4169

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<210> 4170

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4170

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tctggaaatg gatttatata cagtcaacat aaataccccc ttagaaattg gtaatatattt 420
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 aaggagaagc tgaggaacga naagaaanct tcgacaaaga gaatgggnaa tgtacatgct 660
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<210> 4171

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4171

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 ggcacctgtg tttttatgtg gcaagatcct tatctatagg caanangtat gaaatttccc 540
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<210> 4172

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4172

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ctcttctagt	ttttggatga	cccatcatct	cttacctcac	ctacagcagg	aaccttgaaa	180
ttggacttct	gcctcacacc	ctgcaatctc	atctccacat	tatgaccaga	gtgatcttct	240
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aagccctcca	cccacgggtc	ctttccttcc	tggtctgcca	catcttccaa	gtccatntct	600
caactatgtg	agggtccttt	ttcaagttcc	ctaaagcaca	tccccaatgt	tancctcanaa	660
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<210> 4173

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4173

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ctgggtagaa	aatacagcat	tttcacagaa	aaggacgaga	tcttgtctga	tgtggcatct	180
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ttcagcgtcc	tcaacgcatt	catcgacagg	aaggacagtt	actactccat	tcaccagata	420
gcgcaaattg	gagttggcga	aggcaagtcc	ataggccagt	ggtacgggcc	caacactgtc	480
gccaggtcc	tgaagaagct	tgtgtcttc	gatacgtgga	gctccttggc	ggtccacatt	540

gcaatggaca acactgttgt gatggaggaa atcacaaggt tgtgcaggac cagcgttccc 600
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<210> 4174

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4174

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cagcnatgct atccacaatg actttgcaag gatgactccc tctaaccttc ctccctgcta 720
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<210> 4175

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4175

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 tatggagacc tgattttatt ttgtaagagg tgggcaaccc ctgaagcatt ttagtgatgc 180
 gaacagatgt gtctgttacc aagcaaagcc agttaaagaa ggtcacagag gaggaatgat 240
 cacaaagagt ctgagaagcc aactggggcc aaacaagttt tagaacctct actggctgat 300
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 acagagagag caacancgac agcaacgaca gcgaaggatt gcaattaagg acaccgtgtc 720
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<210> 4176

<211> 565

<212> DNA

<213> Homo sapiens

<400> 4176

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 caaactgtat gtggttggag gaagagatgg actgaagact ttgaatactg tagagtgtc 180
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 ggtggtcgtg atgggaagtt cttgtctcaa atcagtagaa tgtttttgat cctcatacta 480

ataangtgga cactgtgttg cacagatgtc aaaanggaaa aggtggcntt aggagtgacc 540
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<210> 4177

<211> 563

<212> DNA

<213> Homo sapiens

<400> 4177

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tgcctaggga tcagccccac tgtcttttct ttgtataact aaatctgcat tttcaaatgt 180
tgtcaatcac atttttctta gagctgaata tccaggctgt aattctctaa accctttttc 240
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agtgagtaag gnaataaatt ttgccttttg tagggaagaa ctacaaaagt tgnnaatcct 540
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<210> 4178

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4178

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 aatgtagtat tgactcatgg gtcaattatt tttattttgc tgcttaaaac ttttgttttc 540
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<210> 4179

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4179

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<210> 4180

<211> 831

<212> DNA

<213> Homo sapiens

<400> 4180

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gctccatccc tcagtgcag tatgccttct gtagcagatt ctactctag tcatttttct  180
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gtgtcatgtg gatcttaagt taccaaacta tgaagtgaag gcttttaaaa gtgcattatt  720
tttaaggnta ataaattttg aagagcaaag caangttttg tgtggtttgg cacaannaca  780
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<210> 4181

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4181

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<210> 4182

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4182

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<210> 4183

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4183

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cttgggagac agacgaaagc ttagggcaca ttggaggaca gcgcagctgt ggctccatt  180
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<210> 4184

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4184

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caggagtccg caaagcgaag atccgcccgc cggttcccca tcatgtccga actgactaaa  240
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tgccgctgga cgcaagggtt tgtgttttagt gaatcagagg gatctgcatt agaacagttt 360
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 ttgagcgatt tcaatgcatt aaattcaaaa aagatngttc aanaagttta acaannattt 720
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<210> 4185

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4185

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<210> 4186

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4186

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ctcttgctct gcttttaaatt tcaatttttt aaagttggcc attgcnttaa aagatttact 720
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<210> 4187

<211> 708

<212> DNA

<213> Homo sapiens

<400> 4187

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gattgattta atgataaaag aatatccagc caaacatgct gagtattctg ttattctaca 240
agaaaaagaa cgtcaacgaa ttacagacca ttataaagag tattcccaaa tgcaacaaca 300

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 tgacttgcag acacatgtta tccaggtacc tcaagggaag taaaaagttt tgccaacaga 480
 gcgaacaaag gtcagttctt acccagtggc tctcatcccc ggacagttcc aggaatatta 540
 taagaggtag tcaccagatg agctgcggta tctgccatta aacacagncc tgtatgagcc 600
 cctttggatc ctgagctccc tgctctagac agtgatgggg attcagatga tggcgaaaga 660
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<210> 4188

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4188

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 gtacttagat tttgagttaa taaatgggtg ttagtttgag atacacatct gttatgattt 240
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 actcagtgtg tataaatgat gaagaataaa tatgcttatt ggagatcatt ttaatctatg 480
 aagcactgtg agacataagc tgttatttat caaaaaatat aattctaag ttgccccagt 540
 gttgctccaa ataacaaaac ttttaaagtc ataaaaacaa gtaaaaattt tgggtaaaaa 600
 cgtaactttt tattaaataa gcattgcatt acagttgagc aaaagataat gttgaaattc 660
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<210> 4189

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4189

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cgtcaacacc tgcagtggcc cagacatcgc acgctccgtc tcctgcccac tgctctcccg 180
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cctaccacca gtcagctccc cacatactca caggggctac cagccaacac caaccatggg 540
caagtacgtc aagattctgt atgacttcac anncccgnaa tgccaacgag ctatcngtng 600
ctcaaggat 609
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<210> 4190

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4190

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atgataaact taaaagaata ggtacaactt ttctgcttta tttaaatttt attttctggt 180
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atgatgaaga aatgattttt gtatgccaaa ggatacaaaa atgtttttat ttaagcgaga 360
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attaatcaaa tctgttttaa gaaaattaat tacttgattt tgaaaactgt aagatatact 420
aatgaagttc ttatggaaaa taacctatit tggagtaata tccaagctg gcagaggctc 480
agtgaacta aatattctta agtgccattg acactattta ttattggtct gtttttaaag 540
caacatgaca atatagagga agagcaatta agattcccat acactttgac cctgttattc 600
catccttaag aaattatttc aaagaaatag ntcaatagag atgaaaagcn tantggnaca 660
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<210> 4191

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4191

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ggctcactgc aacctccacc tccctggttc aagcaattcc cctgcctcag cctcccatgt 180
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tgtnantan taatctgttt taattaacct tcaaagnggn 700

<210> 4192

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4192

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cgttgagttc aaaaggacgc gcggagcggc gccggccctt caccagcagc ccgtccgact 120
ggaaagatct gcctcttctc caagaaactc aaccactagt gacaatgacc agcctcctga 180
ctactccttc tccaagagaa gaactgatga ccacccaat ttacagccc actgaggccc 240
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ccaagggaga ancattgatt gatgtgggca aaatccaaag ctccagccaa ggtcgcagtc 600
ccaaatgccg acattcactg actccaaggg gaccaangac atgggagaaa gctgtttann 660
gatnancctt aaaccaaa 677
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<210> 4193

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4193

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cagctgccct ctgtgcaagc cattacccca ccangcctga cacagcttct ctctctgggc 480
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 ttcctttgac natctctctt taggcctacc agtttttgn aacanaaagt ttacgggtca 600
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<210> 4194

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4194

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 ccctctctgg cctggctcat ggtatggccc cctcccctgg tcgccccag ccgtcccacg 180
 aagggtgtta tgcgaaatgt ttcccatgca ggaattggct gaattctctc aacatccctg 240
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 cttatgagag aaatggctac ctgagccctc agcagcagat gggggcgggc tgaagcctcc 540
 tgctccctgg gggtcagggt ggcagcactg atgctcctgt ccctaagtgt ccatgtgtgt 600
 ttccccaag gatcagccan aggaggaacg ggggaaacan gagtcctctc ctaaccctc 660
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<210> 4195

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4195

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aagtttgtga actgacaacc gtaaaatctg tggtaaattc acaggcttca tcaatgacac	240
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tgggtccacaa gttccaaga caagcacatt cctgccaaca tgatccttgg acaaactgtt	540
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nnana	605

<210> 4196

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4196

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gatatacaaa aaaaggctat acaaagtata tacaagaaa tgcatacaag ctgtggtata	540
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gcttaggaaa agaggctgac ctagctatgg agaaatTTTT tgggtgagtc ttaaaagaga 660
 aaatTTTcct ggcaagaaaa agaggggaaa gaatTTTggg ngtcagtga gatnagcaat 720
 gtccaaaagg nacaagaggg aaagaaagt gggaagcaca catngttaa a 771

<210> 4197

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4197

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 tgtcttccct accctcttca ttgcctcttt caacagtatg aagttaaaat cagctctgaa 180
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 gntacccctc aatanccac ctgggaaggg agctgccnat gagccggaag cagntgggga 600
 ggagatgaaa ctggggctat cggctttgca ngctgggagc cccctcctgt anctgcctta 660
 tcttcnggta t 671

<210> 4198

<211> 389

<212> DNA

<213> Homo sapiens

<400> 4198

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 ggagccggac gcggtaatgc cccagcggcg cagcgggagg ctgcgtccct gagccgctat 300
 ataagcgagg caggaacat ccggaggggc tgaagatgaa ggtgcccgcg catgggcccc 360
 cgctgattgc cagtccttct ngancccg 389

<210> 4199

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4199

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 aacgcttctc cggctgcacc ctgaccgatg ggaccctgaa aaagcttgag tctccacccc 180
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 ggaaaagtta ctgtctgggc aacaacccaa cagctannaa ggaaaaanct caaagnaaa 780
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<210> 4200

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4200

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ggaagcgtgt ggatagtagg tcagagggtca gcagtgtctg tgggttaggg tgtaatccca  180
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gatcttgcca aaaaacaatc attccttaag tcaccactta ggatagacct agaataattg  360
tcctttctca agagcaccan agagttttct ggtaatccac gcaataaaca gttataaaaag  420
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tatcatagga acgtactggg aaaaccaata gaattcacgg atcctttgaa aagaagacgc  600
acancactgt aaattctgtg gaacagggag aanaactggt ccttgggggg gaaggcatcc  660
ttccaattcc taactggatn aannaaag                                     688
    
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<210> 4201

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4201

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tcctgtctga gaactatggt aacagatggt aatagttgca ggggtctcacc acttcattag  180
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ccagcaatca tagttaatac agtacttggg gacacgccct acccccttct cttccaagtt 300
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 ctaggcatta ttttccataa aatccccctc caanaagtng gaaaagantt ccncttggct 720
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<210> 4202

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4202

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 ggcanagttg ggcctaaatg agcaccatca aaatgaagtt attaattata tgcgttttgc 180
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 aatcgagatt tatgaaattt gcttttcang ggttancatt aaattatttc ctacaagnat 720
 ttttgg 726

<210> 4203

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4203

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tggatttatt gtgttactat ggtgaccagg agccctcaac tgattacat tttcaacaaa 180
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atgccangc ttacaagggt ttacgtgaaa tgaaaagcca ttgggnatag naacctcgct 660
tgcaacatat caccatatta attcncctgg tttggtcaan cctgggggaa ncccttttaa 720
aggaggtt 728

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<210> 4204

<211> 873

<212> DNA

<213> Homo sapiens

<400> 4204

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ataatccaaa attctttggc aatcttcagt ctgatgattc caaaaaaat gactcaaaaa 60
taaaagttac tgtgttgga atgtctgaat atttgaaca atatgaaagc atgtcctcaa 120

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ataaagactc aaaaaggcct aagacatgtg agcaaaatac tcaacttaat agcatagaga 180
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<210> 4205

<211> 577

<212> DNA

<213> Homo sapiens

<400> 4205

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577

<210> 4206

<211> 505

<212> DNA

<213> Homo sapiens

<400> 4206

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 gagagagtct tgggaaaacc aaggatagtt cccggagatg acttttggac tgcgnaacg 420
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<210> 4207

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4207

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 aatgtcaaaa gttacatcaa aaataatggc tctgattgtc catcatctca ttcatttaat 180
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gataaaaatg ggataaaggg aggtttgaaa agtgtttctt tattcacatc aaagctagca 360
 aagccatcca ctatgtttgt gtcattctaca gaggagttaa accaaaagtc tttttctgga 420
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 aatccccaag acagtagtaa ntctattaat tatgaanaaa tgggtaaggg gcacaaaggt 660
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<210> 4208

<211> 552

<212> DNA

<213> Homo sapiens

<400> 4208

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 taccaggggg tactgacctt gatttctcct acaaggacca cactgccttt gngtttaatg 480
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 gatatacatgc ca 552

<210> 4209

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4209

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<210> 4210

<211> 822

<212> DNA

<213> Homo sapiens

<400> 4210

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gaacatgatg catttgaaaa tattgttcaa tgcagcaaaa gtcagtttcc gttaaggcaa 600
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<210> 4211

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4211

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gtttaatttt tataaacaaa aatagctata aagtacaaag ctgctgctgc atgcaacctt 180
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<210> 4212

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4212

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gtggttgggg aggccgccac actcttcctg actcacctca aggtacctgg caggttgtat 180
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<210> 4213

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4213

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aaaaaaagaa gttccagagg cccagacttg ctactggtgc ccagggggct gtggggcagc 180
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<210> 4214

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4214

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<210> 4215

<211> 839

<212> DNA

<213> Homo sapiens

<400> 4215

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gaattttgtg aaacaaatgt agnccccatc ataaggggca agatttgga caattgntaa 780
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<210> 4216

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4216

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<210> 4217

<211> 860

<212> DNA

<213> Homo sapiens

<400> 4217

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<210> 4218

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4218

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<210> 4219

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4219

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<210> 4220

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4220

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<210> 4221

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4221

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<210> 4222

<211> 745

<212> DNA

<213> Homo sapiens

<400> 4222

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gcaggtcagg ccgttggggg cctttcgttc ttagggcttc tccaccaagc ttctaaatgg 480
ggaatgccaa ctttgtgcca ggcacacact acctgctgag acactgtgga tgaacaaggc 540
gttgaccagc ggctcactct gtagaggaag aagaccagag aatggntacc accaagacag 600
tgataagtgc tgcaacaagg ttcaanagct gcacaagaag tcccaaagg tagtggaanc 660
catcaatccg ggggcttaag gaaagaagct tttaaanggg aagattaaag ccancaaggt 720
gacnccaaaa aactggggta attcn 745

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<210> 4223

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4223

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gagaaaaaaa aaagaaaaaa aaccatatgt gtattagggg gactgagtgg tgacttcatt 60
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tactgtttga aaagaagttt cgttttaatt ttggaattta gaatgtgtat ttgcaaagtc 180
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aaaaagaagt aacttgcttt gtaggtttgt attgttgatc taaacctgat acatgcttca 300
tttaatcagg aataatcctt ttttttctgc tggacatgta taaatttcac tggattgtat 360

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aaatTTTTat ctattgcctt aaacattttac atgatttctca atatgtttta gctgtacagt 420
 tttgggtgttc atcttagagg attcttcagc agaagtgata tttctttact gttttgtgag 480
 gtaatactga ttttgaaaat atatataagc taaaaacagt atttcgttga tatcagtagt 540
 cattgggtta actataaagt caagtgccag caaagaactt taaaactgta aagctgtgta 600
 tagaactgtt ttgtgtagca tggaaataat ctgtcagctt tttaaagtca ctaaagtgtc 660
 ctggattatc aacttgaagg naatTTTTtg aattacaaag ttgacaagtt gcctgggtgt 720
 antgggctca tgccctgtaa ncccaagcaa ccccggggct taaggtgggg aaggattgct 780
 tcaagcccaa ggagttttgn gaacaanccc ttggggcaac aatanncaa aacccccaac 840
 ccctacnaa 849

<210> 4224

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4224

ttagaacagc atctgaaaca aattcacgag gaagcactga gcaaattcca gaaaattgaa 60
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 tgtggccccg attcatttgc tacagatccc tctaaacaaa caaccgtcag cgttagcttc 180
 ctcttaccgg acatcaccga cacatttgaa gccttcacat taagtcttct gtcttcactc 240
 ttgacttctg ggcccaattc tcccttttac aaagccttga ttgaatctgg ccttggcaca 300
 gacttttctc ctgatgttgg atataatggc tacacgaggg aggcctactt tagtgtcggc 360
 ctccaaggga ttgtggagaa agacattgag accgtcagaa gcctcataga cagaacgatt 420
 gatgaagtag ttgagaaagg atttgaagat gatcgaattg aggctttact tcataaaatt 480
 gaaatacaga tgaaacatca agtctaccaa gctttgggct gatgctgaca tcatacatag 540
 cttcttgctg gaaccatgat ggggaccctg tggagctctt gaagttagga aatcagttag 600
 ctaaattcag acagtgcctg caggaaaatc caaaaatttt gcaagaaaaa agtaaaacag 660
 tattttaagg aataaccagc ataagctgac tttatcgatg anggcaaag acaagtnnca 720
 cgaggaagca ngcacaaggt ggaagccacg aagctcaagc aanaagggcc aagg 774

<210> 4225

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4225

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atttttagta gagatgaggg ttcacatgt tggtcaggct ggtctcgagc tcctgacctc 60
gtgatccctt cacctcggcc ttccaaagcg ctgggattac aggcgtgagc taccgcatac 120
ggccgatctc aagtaatttt tttttttttt ttttaagagac ggagtctcgc tgtgtcgccc 180
aggctggagt gcggtggcgc gatcttggct cactgcaagc tccgcctccc gggttcacgc 240
cattctcctg cctcagcttc ctgagtagcc cacgctgggc taatttttgt atttttagta 300
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cgcctcggcc tcccaaagtg ctgggattta ctggtgtgag ccattgcgcc tggccacctt 420
tccccagctt tcttaagtca ctgcgcanag gtgagaggaa aaaggaaaag tgatacccaa 480
aataaaaggg cataagtata ctcatatgat tattgtatcg caggtggcat tgcctttang 540
ttcttgttta attttttaa actgagataa ctgtttaatc ataatatagt acagcttgta 600
cttgtgacct gaatttactt aggggtgctga acngtaatta acctganggg ggccaatgtc 660
atccaatcan taatgggttg gnaagagaga acaagnccta agctccggaa atgtggacca 720
a 721

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<210> 4226

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4226

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gtaagtcccc ccgcctcgca tgatggctgc ggtgccgccg ggccctggagc cgtggaaccg 60
tgtgagaatc cctaaggcgg ggaaccgcag cgcagtgaca gtgcagaacc ccggcgcggc 120

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ccttgacctt tgcattgcag ctgtaattaa agaatgccat ctcgtcatac tgcgctgaa 180
 gagccaaacc ttagatgcag aaacagatgt gttatgtgca gtcctttaca gcaatcacia 240
 cagaatgggc cgccacaaac cccatttggc cctcaaacag gttgagcaat gtttaaagcg 300
 tttgaaaaac atgaatttgg agggctcaat tcaagacctg tttgagtgt tttcttccaa 360
 tgaaaatcag cccttaacta ccaaagtatg tgttgtcccc agtcagccag tgggtggagt 420
 ggtgttgatg aagggttttg gagcctgcaa gttgttgctc cgcttggttg actgctgctg 480
 caaaactttt cttttgactg tgaaacatct angtttgcaa gagttcatta ttttaaact 540
 tgtgatgggt gggctgggtga gcaagttatg ggttctctaa aaaggtgtct taaaaagggt 600
 gattttgtta natgagcctt tgtttggatt gcttcaagan gtcnctagga ttcaaccaa 660
 tgncttactt caaagaattt acctttncct tctga 695

<210> 4227

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4227

attgagaaag agttcaagaa tgactacaaa aaactgtcaa tgcagtgcaa agactttgtt 60
 gttggactcc ttgatctgtg cagaaacact gaagaagtcg aggccattct gaatggggat 120
 gttgaaacgc tccagagtgg tgatcacggc cgcccaaattc tcagccgttt aaaacttgcc 180
 attaaatatg aagtaaaaaa attttagct catccaaact gccaacagca acttctctcc 240
 atttggatg agctttctgg tttacgacag cagacaatgg cggatcaagt ccttgtggtc 300
 cttgctgttg ccattggact gcccttcctg gctctcattt actggtttgc tccatgcagc 360
 aagatgggga agataatgcg tggaccattc atgaagtttg tagcacacgc agcctccttc 420
 accatttttc tgggactgct agtcatgaat gcagctgaca gatttgaagg cacaaaactc 480
 cttcctaattg aaaccagtac agataatgca aaacagctgt tcaggatgaa aacatcctgc 540
 ttctcaagga tggagatgct cattatatcc tgggtaataa gcatgatatg ggctgaatgt 600
 aaagaaatct ggactcaagg cccaangaa tatttgtttg agttgtggna catgcttgat 660
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<210> 4228

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4228

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gaaaaacaag ctcagcgatg gcgggctcca gaaggcagcg gtctaggcga ggacgcccgg 60
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gtgaaacgac taatagcaga aggtaataaa gaagaactac gaaaatgttt tggggcccga 180
atggagtttg ggacagctgg cctccgagct gctatgggac ctggaatttc tcgtatgaat 240
gacttgacca tcatccagac tacacaggga ttttgcagat acctggaaaa acaattcagt 300
gacttaaagc agaaaggcat cgtgatcagt tttgacgcc gagctcatcc atccagtggg 360
ggtagcagca gaaggtttgc ccgacttgct gcaaccacat ttatcagtca ggggattcct 420
gtgtacctct tttctgatat aacgccaacc ccctttgtgc ccttcacagt atcacatttg 480
aaactttgtg ctggaatcat ggtaactgca tctcacaatc caaagcagga taatggntat 540
aaggtctatt gggataatgg agctcagatc atttctctc acgataaagg gatttctcaa 600
gctattgaag aaaatctana accgtggnct caagcttggg acgattcctt aattgatagc 660
agtccaattc tccacaatcc gagtgcctcc aatcaataaa tggcctactt tgaagacctt 720
aaaaaagttc cggtttcac aaggggagcgt tnaacanggg agacaaaang gggaaatfff 780
tgttgcaaaa cctcctgtcc aaaggggggt ggggtccaaa ancittgn 828

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<210> 4229

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4229

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atttgcaaaa tccctttgcc atttaagatg acacaataat tggaatgata tcccatcata 120
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 aagaaggaat gaatgaaatg aatgaattct gatagctgga agcacagcaa ctagcttttt 240
 ttgtagcatg agtgagagaa ggtattgagt tccttattga agaatgcagt tgcaacagtt 300
 tatcactagt gagctgcttc ttggtaacta taagacataa gcagacaaga aacagcaaga 360
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 gtggtttcaa gaagttctcc ccaccctcca gactgctgtc atttacaatt gctagagaac 480
 aagagctggg agcctctcct tggttctgct cctgtggcat agccatgggg gatgcagaag 540
 ggcantgggtg cccactaaag ggaatccccg tcagctttgg ntttaagttt ccagagattg 600
 agcctctgnc ttangctgag agaaatactt antgtgagtc ctttaattgct ccnta 656

<210> 4230

<211> 377

<212> DNA

<213> Homo sapiens

<400> 4230

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 ctggatttat aagtgtgttt atgtttctct aagaatggga gcttctgtta acttaggggt 120
 ggagttgttc tgaggaaacc agtagattgg atgactgact ggagaatcca gaataacaaa 180
 tccattatcc agacatgttt acttttatat taagaagttt gttgattagg tcttaatttt 240
 caaatgcaaa caccaagctt tgaaaatatt gcatatacaa tgtattggnc accaatttaa 300
 taatattttaa tttgaagtta attactgtta atccttctan aaaagttttt tttctttaaa 360
 taaaagtaca tanatat 377

<210> 4231

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4231

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tctacggcag gctagtggcc gtggccaccc ttcggaacca cgggcctcgg acggcccagc 120
gggctgctgc tcaggttctg ggaagtctctg gattgtttta tgaccatgga ctccaagtac 180
agcagcaaca gcaaaggaat ctctcactac atgaatacat gagtatggaa ttattgcaag 240
aagctgggtg ctccgttccc aaaggatatg tggcaaagtc accagatgaa gcttatgcaa 300
ttgccaaaaa attaggttca aaagatgtcg tgataaaggc acaggtttta gctgggtgta 360
gaggaaaagg aacatttgaa agtggcctca aaggaggagt gaagatagtt ttctctccag 420
aagaagcaaa agctgtttct tcacaaatga ttgggaaaaa attgtttacc aagcaaacgg 480
gagaaaaggg cagaatatgc aatcaagtat tggctctgtga gcgaaaatat cccaagagag 540
aatactactt tgcaataaca atgggaaagg tcatttcaag gtcctgtatt aatangaagt 600
tcacatgggg gtgtcaacat tgaagatgtt gctgctgaaa actcctgaag cagttaattn 660
aaggaacctt attgatattt gaaagaaagg catccaaaaa gggaacaaag ctctccanc 720
cttgcacaaag aagattggga atttccaacc ctaataattg tgggaatcaa caannaagna 780
aaacaatggg ncaaagcttt t 801
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<210> 4232

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4232

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ggattatittt ttcccctttg gaataacttt tgtgaattat tataatgcag tttccctagt 60
aatatagtac ttttcatttg aaccacatct tgactgatct gtattgtaat atatgtcagc 120
aggtaagggt gcctgctgga tcattttgag gacagaggca tgagggagca catctcttgt 180
gaagttgcag ccagatttgt aaccaaccct gaaattcatc agcttaattc atttatcagc 240
ttgattcatt catcattcat tgcttatatc caaagcaaag acggtaagaa aatgaattca 300
tcctgaaata taaagaaaag ggtctgaagg aacaaacacg attctcttat attttggggc 360
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tcattgagcct tgatagacag tttcctctcg tcttcatttc caccctcat cctcagtagt 420
 ctcctctccc ccacgcccc ncccaacttc ccccccaagc ttgagttaa gacagaatag 480
 ctaaagacag tgctgccttt acaatgcagt aattgccatc tttggggccg aaagacaagc 540
 tctgtgttgt gcttttcttg accaaccctt atcctgggct ctggagcttg tgtttccctg 600
 ctggcgactg taccttgggt aattgggtgct acctcccctg tttgctcant angaccctgg 660
 tccnggnngg caatt 675

<210> 4233

<211> 594

<212> DNA

<213> Homo sapiens

<400> 4233

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 tccaccagaa gttcgggatt gcaaaatggg actctggcag caaatttcaa actgtatgcc 120
 agacctggcc ctttgcagtg atataaaatt tttcttgagg tgtctggaaa gatggctgaa 180
 taggaacagc tctgctctgc agctcccagc gagatcaacg cagaaggaga taatttctgc 240
 atttccaact aaagtacca gctcatctca ttgggactgg ttagacagtg ggtgcagccc 300
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 tccggcacag atactatgct ttccccacgg tctttgcaac ccacagacca aggagattcc 480
 cttgggtgcc tgcaccacca agggccctgg gtttcaagca aaaanctggg cagccatttg 540
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<210> 4234

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4234

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tgctcttttg agcagctttg catgacacgc tctggtaaaa ggtgtgcatc tttaaattat	180
ttcatggata ctttgaaaaa tattgtatca cttcaaatac agcaataagt ttatatgttc	240
tcaagatttc atttgTTTTT aagaatttta agttcgtgga ttaatatcac tacttgaata	300
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ctgtgcactg gcacgcttgc atcangggct ggggccacac ggccgccaca cagattcccc	420
cgtgatgcct ggagctgctt ccanagccgg gtgtctccaa gaggcacctg taggacttcc	480
catttaagaa atctcttgag tgggtttgta ngttaccttc tccaaggntt atttaggaca	540
nagatatgtc tgggaaggtc atgggtcaaa ttcctcaca acccaactcg tctgcgggtg	600
caancccant ccaagn	617

<210> 4235

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4235

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gagagggcac ggcctcatct gtgaggggCG gccagtgacg tcacggctgg ctgtcatctg	120
tggaacgtct tcttgtcaca tggggatcag caaagaccg atttttgtac caggcgtctg	180
ggggccttat ttctcagcca tggtagctgg gttctggctg aatgaagggtg gtcagagcgt	240
tactggaaaa ttgatagacc acatggtaca aggccatgct gcttttccag aactacaagt	300
aaaggccaca gccagatgcc agagtatata tgcataattg aacagtcacc tggatctgat	360
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tggcaaccgg tctcccttag cagatctgac actaaagggc atggtcaccg gattgaaact	480
gtctcaggac cttgatgatc ttgccattct ctacctggcc acagttcaag ccattgcttt	540
ggggactcgc ttcantatag aagccatgga ngcancaagg gcactcaatc agtactcntt	600

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613

<210> 4236

<211> 892

<212> DNA

<213> Homo sapiens

<400> 4236

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aatagggtga cttaaaagaa ggcattccat catagatggc aaaaaaccaa aaatctgttg 60
gaccagtaac tcttcttttt ctttgacttg cttagtaggt taaaaagtga taatgaattc 120
aagtttttgt tattgttggt caaaacatca tttttaagac ccgaggctct agtgctgcat 180
ttcctacctg ttaataaagg aatatctgga acataaatat ttgtgcagt agtgggcatt 240
tctctagaag tgtttcaaca gatacagtac agactcctag aagtagagat gctacagcag 300
tgggttttgcg tatttaacat cttggttgag attgtgaaac tttctccgat aactttctac 360
ccatttataa ctttagtaat atacaatgtg acttttttta gtatccttgc tagtattggg 420
cattgtcatt gttttaatct ttgccaatct gatagttata agtgatactc atttaaattt 480
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cattggtggt gattactggg tattggtggc tcagacgtag gatgatggac tgttggcatg 600
atattgcctt gattgcctaa tctgtaactc ctaataaata ctggaaaatt agcttgcctg 660
aaacattggn aagaactttt taaaaattac ctttaatttc ctacttgggc cttgactggc 720
atcctggggc ccaagccagt tncatatgca tatnatatga atgacaaatg gaaaatgggt 780
aagacagcat gtancctggt cccctaataa aggggtactcc tangggcaaa agaccttgnt 840
tttggaataa ttttgaatt acnaaatttt tagncctaaa taacaacaaa aa 892

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<210> 4237

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4237

atattatgaa ataccggcc caataaaca gacaacagag cgacatctag ctatcaactg 60
 tgttcatgat agagttgttt gctggtggcc actggtcaac gatgatgctt ggccttgggc 120
 cccatttct tctgagaagg acagagccaa tctactcctc ctgggttatg ctcaaggaag 180
 actagagggt ctgagttctg tccgcacaga atgggaccca ctggatgttc gctttggcac 240
 caaacagcct tatcaggtgt tcacagtga gcactccgta agttagaca aagagcccat 300
 ggctgacagc tgcattctatg aatgcattcg gaataaaatc cagtgtgtgt cagtcaccag 360
 aataccacta aagtcaaagg ccatcagctg ctgcaggaat gttactgaag acaaactgat 420
 tctgggctgt gaagattctt cgctaattct ttatgaaact caccgtagag tgactctctt 480
 agcacagact gaacttttgc cttcantaat aagctgccac ccaagtgggt ccattctgct 540
 agttggcaac aaccaaaggg gagttgcaaa nttttgntat ggctctatcc cctattaaca 600
 tccaactgtt ggctgaaaga ccgcttacc angggaggaa tcttgcaaat tcaattaaan 660
 nttattttgg ntccctccaa gcaagttcct tgttcaaaat gcaaattggg gn 712

<210> 4238

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4238

agagcgaact tgcggctcgt ccgagtacat gtgagcggtat atcgcccctg cagctgggtta 60
 tcctgacatt atgcactccg aagcagaaga atccaaggaa gtggccacag atgtcttta 120
 ttccaaaaac ctggccgttc aggcacaaaa gaagatcttg ggtaaaatgg tgtccaaatc 180
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 gaccaggag tacacccaaa acaagaagga ggcagagaag atcatcaaga acctcatcaa 300
 gacagtcac aagctggcca ttctttatag gaataatcag tttaatcaag atgagctagc 360
 attgatggag aaatttaaga agaaagttca tcagcttgct atgaccgtgg tcagtttcca 420
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 gatgctgcac caaatcattc agcgccacct cactgccaag tcacatggac gggttaataa 540

tgtgtttgat catttttcag attgtgaatt tttggctgcc ttgtataatc cttttgggaa 600
 ttttaaacc cacttacaaa aactaagtga tggtatcaac aaaattgttt ggatgaagag 660
 aacatattag cacatgagtt aagantgggtg accngatcat ggatttaatt tgaagatggn 720
 gcactgctgg attttatgaa gggaaaaaag gaagaatttt cctaaagnat tacacaatat 780
 ttcaanaaan ggcttttacc caanttcaat ttgtca 816

<210> 4239

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4239

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 gttcattttc ttctcaaaag ctttttgta ttatttccaa atgaatatta tgttgtgtctc 120
 agacaaccac agaaagtttt gtttttgta cattctactg ctactgtgtc aatggcagca 180
 ttttgatata ggtggaggga tgctcacatc aaccccataa ttttgtgtcag cttctcctga 240
 agttatcaga agcatacaat ttaagtaaaa acagtatctt cgctatccaa atgatgttcc 300
 aaggtaaadc tcctcagatc cttccagta catgtatgct ccaaggcctg ctctatgtag 360
 aacttttgga gccatcaacg tactgcttga ggttgctttg aacaaaaggt atttgacata 420
 agctctataa gatcaggac tcttttttan ttattcatt gttctttatc ttctagagca 480
 ataatttgca aaatgactat ttattgaata aactaggacg gangtgaaaa ggaaagaaca 540
 agctcatcct tccaagggga agagagcagt atcccaaadc caaattgaag aaaatanaca 600
 tatatctatt caccangaag agatanaagg gaagacaggg cagaatttct gtgggtctta 660
 caaactcngc acntcta 677

<210> 4240

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4240

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agtcagggag gcgaactgct gagcactggc cgcggacgct ccgttgcagt ctcgcccagg 60
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ccgggtcaag ctgcggggtg tacggggcaa naacatcaat naacgaagac gttggtcccn 480
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<210> 4241

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4241

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gatctgggag cacaagatgg tgtatttggg ccaagttaaa aacccttga gttattcaaa 540
acaatataga gaaaagagga agcaagaatc cccacagnga gaatgaaaga ttcagactgg 600

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ctggataact gggagggaag ctcaaggtgg gaantgcaac tggctggtat ccnggggttc 660
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<210> 4242

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4242

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 cctggagaaa gaaaggctaa tatttatttt actcaaagaa gagctccatc tacaggcatt 180
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 gggcaccaca gaatgnaaan cccattttca actgaagcta tctttgctcc aagcctgata 480
 ctccagactg tgctggngat agtcataccc cactgggntt tticcttcac cgagggactt 540
 ggaaagntct tgtttgctag accgtaaagg gaacnaaaaa agggggattc tgccaaggaa 600
 aatgggggaat ggnttcatga gtctaaggaa gganntatca gagtatggng gaaacacacc 660
 aaactacctg 670

<210> 4243

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4243

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 caagtgaag 729

<210> 4244

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4244

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 gtcagcagaa tctaaacccc tacattaaag ctttgcctcc cattctgtgg ttgtggtggt 180
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aaaaatcagt atatatttta actttttgtg acatgctaac acattttcag aataattatt 660
gcatagtaga atttattact ccaagaanag aanngacctt acntcaattc aaatgaaggt 720
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<210> 4245

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4245

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aattaaattt tatatttaac tgatacccaa gcatttgatg aaaacatgtt gcaggaatgg 480
gagagtattc catagctttt gttttattgt gatttgatta aatgtgacaa ctaataagtt 540
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tttancnaa 789

<210> 4246

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4246

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gtctctccac ccgcctcccg ccctctgtaa gggaccccgga gggcggcgcc ggaaacacgg 180
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acttttttat gaacgttaac ggcacannat acgggttttt tggaaaaaaa aaaaggcang 600
anttcaaccc gttcggcccc tttgtgaagg tccattcatg aaaccctcga ngttaaaagg 660
cc 662

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<210> 4247

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4247

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acaagcttaa aaccattccc acaaccatag caaactgtaa aaggctgcac acccttgttg 180
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cagttacgtc aaccttctgg agccatggac tggctgagat ggcagggcag agaaataagc 480

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tgtgtgtctc agcacttgct atggatagct ttgcaagagg ggggtggganc tgtgtatggc 540
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 gtgcttttag aagaggtaca gcaagtcaac taatgacaca gnttttcaaa gggtaaacac 660
 cttctttggg aatcccacaa gggnaatttt nggaatggct ggggccaaaa aatttggggc 720
 gccccccggt cccccgggg ncnaaaatcc cggccccggn 760

<210> 4248

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4248

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 gtaaaaagaa ggatcagatt ggaaaaggga cccaggggagc aactgcagga gcttcatctg 180
 aactggatgc cagtaaaact gtgagcagcc caccacctc cccaagacct ggcagtgtctg 240
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 gttcttgtgt ttcaaattag ggaaacatct tcctcaaagt ctgcctagt agatatggcc 540
 tactggttgc ctcatagctt tgtacaagat tacgaggact gaaaataatt gggcatttac 600
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<210> 4249

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4249

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gaagagatgg cgaaaagacc ctctagaaat atctaaaaat tcagatgtgt ggacacagaa	180
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aaattctttt cattttgttt tggctctgta attaaacact caaagtgtat cagtagctaa	600
aacattactt caataccac atttattctg gctagaaaat cattccattt tataccatgg	660
agcatccaag ttatttaatt aagaaaattt cccttaagat ttataccana tatgggnaaa	720
gngntaaang ccaatgttag gggcaaaaca aaatgtctgc tgcggttggt gatttcaatt	780
tgcataat	788

<210> 4250

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4250

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<210> 4251

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4251

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 tttctgaagc aggactgaag gggcccccaa gtgccaccc cctgcggtta tgtctcctcc 180
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 cttgttttcc tgtcagttgg acnccctacc tggntccag ggaagantgc aganaaaagc 600
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<210> 4252

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4252

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<210> 4253

<211> 915

<212> DNA

<213> Homo sapiens

<400> 4253

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 acaaacttaa ggataaatgg ggttcttgag gagggaagag aaagctaaac cgtttgggaa 840
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<210> 4254

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4254

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 taaaactaaa ggtaactgan catgccaant ggttgggggtg agaaaattgc atggnggaat 780

ccaagacaca gaggcagcaa aaaccaagt gctgggaant caagagtgan aaaagt 836

<210> 4255

<211> 539

<212> DNA

<213> Homo sapiens

<400> 4255

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<210> 4256

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4256

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 acctgcagaa cttagccaag agtctgggtc tccgggcca cctgagggca accaagttgt 180
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 tggagtccat tgatcaatat attgagagaa aaaagaaaca ttttgaagaa cacaattcca 720
 tgaatgaact gaagcaaccc atcaataagg gaaggggtca ggactccaag tacctccaaa 780
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<210> 4257

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4257

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 aaaaatggtn cagtttttaa gaattttcta ttaaccngca gggtataaat tagctncatg 720
 ctgcaagact ccaacaaaag cctaagtcca actggaaagc ccaaatgccn aattttaang 780

ggntttaat

789

<210> 4258

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4258

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caaatgttta taaaatgact accgtatgct aggcagagta tggngcatag caactatgaa 60
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atttactccc attttgatta tattaagaaa gtatgtgagg gcatgagcct ctcaggaggg 180
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tccagtgtga tgacatggct tggtcacccat gcttcgtgtt tgctaaaaag aaaccaggga 360
tatgagtttc tgaattctca acctgggtgcc ttgcccagag aacaaagtca ggttaatcag 420
acgtcttccc ctctccagcc caactcattc gctggctgac ctctcntggn cccatgggtc 480
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catctaagtc nancaacaag attccaacct ccaagnctgc tcaagccctt gcctcctgcn 660
tttggggaaa cgggacatcg cttttttccc ctgangttgt gtgttgccaa aaaagtcgtt 720
gaaantcaan cctttgn 737

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<210> 4259

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4259

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aaataaatac atctgggatg actgaccaag aacaaagaat gtaggcatca actgaacacc 60

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aactgtatac ctgggactgg atctgagggt aggattgcca gattgagcac aaacaaacaa 120
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 gtaattttta ttgtgttcct gtgcaatgat aggacgcacg taccctgaaa acctgtctgt 240
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 aagcctactt ggggtgaaaat agctttccaa ggagccacat tgtggggacn ttnagggaac 600
 agccccacac tttgggggna cttggctgtc tccaactcat cctcacttnc caaggctgga 660
 caaaggngat taaaaagaaa atgccaaagg gggttgggca aggcaagaac cctgtttggc 720
 ntttgnaagg ngct 734

<210> 4260

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4260

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 ttaaaagagg ctctttggaa gtatatacat tattaacata atgtgtacaa gtccttttga 180
 aatgacaact ttaatgggtt tcagctcttt tatctagagc ttgagataat tcaagctgag 240
 tttttcaggg catatcaca cggcaaagtg ttcagcagtg ggatatcaat gcttattttac 300
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 cattaagca cagatcatta agcaataaaa accaaattgt ctgtcattca aattataact 420
 gcagttatit ttgcatggta agagtgagg gctaattttg tgtgagatga actttgtaaa 480
 ctactttggg aaatgttctt tggaagtaag gttttttctc ctttagtctt atgcttccac 540
 ttttgtctca agattcaca tccattaana catgggggaaa aaagaaaagg taaaattgag 600

agacttttgt tagaggagct atttgatga accaacattt cagattttcc aaaatgtaag 660
 ttaggaagct ccaatggccc ctgcattaac aaaatacact gttacnacct aatcccaaga 720
 gtgtcattac agtgagaatc cncanttaaa ngcattccag tggaaattat aanaat 776

<210> 4261

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4261

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 ctccataccc cctaaaaatc aaatgatgta tatttttcca tgaaatgcct ttgggtgtgg 180
 tttatgtgca tgactgattc ttagaaagcc aataagatag ggggtggagcc aagatggccg 240
 aataggaaca gctccagtct aaagctccca gcgtgagcga cgcagaagac gaaagatttc 300
 tgcatttcca gctgaggtag cgggttcata tcatcgcgga ttgtcagaca gtgggtgcag 360
 tgcaccaagt gtgagccgaa gcagggcgag gcatcacctc acccaggaag cgcaaggggt 420
 cagggaattc cctttcctag ccaaggaaaag gggtagacaga tggcacctgg aaagtcaggt 480
 cactcccaac ctaatactgt gcttttccaa cggctcttagc aaacggcaca ccaggagatt 540
 gtatcctgca cctggcttgg agggctcctat gcccatggag cctagctcat tgctagcaca 600
 gcagtctgag atcaaaactgc aaggcagcaa gaggctgggg gaagggcgcc cgccattgcc 660
 caangcttga gttaggtaaa caaagtggcc gggaaactcn aactgggtgg agtccaccgc 720
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 ata 783

<210> 4262

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4262

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ctccagtcct tctctttcgt cagtataaaa gattaaactc tacagaagaa tgcaatcaag 180
tgatggcttt tccttttagaa tttgaatatg gaggctacag gaacagatga agttgacaag 240
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acattgagaa ctggccagat gctcttgggc tcaaggactc atactacact ttcttgnag 600
agcntgggac ctggccctga tgccttggna taatgaaaat tcaaactctg aatcaaggga 660
cttccanac tggtaaaaa attttaacng caacaatttn gaagncatcc actttcaagg 720
gggaaaagaa gaaattccaa aaacccccaa acaaantttc c 761
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<210> 4263

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4263

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aagtctcaat gtttaaggaa aaaagattta gaaatagtgg tttttaaaag tttgatggaa 60
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atcctgaggg atttggttgg tattgttttt gggttttctt cttgaaactc agtattaata 180
cactgaaaag tancagattt ttttctacct agagttttct gtttatccat catgagccca 240
aataaagtca caattgtatg ttacctgctt tacaagaag ccatttatgt ttaattgact 300
gttcattttg ctttcttgtc tgctgggatg acaaccgtga aattcagtct ggtagttttt 360
atgagttgga catgaacctt ttagaaatga tttaaagtat aaaatcattt ctcacagggc 420
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tttcaaaaca tanacctgtg atcagaaacc tggaatctag aaatttattc angacttgca 480
 agaatttgta gcatatctac attattggag atctattgaa agggcaagaa aaagatgatt 540
 gcccgttagt atcaacagtt atggtacagn caactatgag agaaaccttt tagatttggc 600
 agctgtatca ttaataangt gtcattgggc caattcnaan attacagtaa tcnaaaaatg 660
 gg 662

<210> 4264

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4264

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 cgactacagg gtccggtag gctgcgggtc ttttgctggc tctttcctgg aatattacgc 120
 ggctgatata agctatcctg tccgaaaatc catccagcag gacgtcctag ggaccaggct 180
 tcctcaactg agcaagggga gccccgagga gcccggtgtg gggtgcccc tggggcagag 240
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 gaagctgggtg gactacattg tgaaggccaa gggcgcgag agccacctgc gggccatcct 360
 aaagagcagg aagccatctc gctggctgca gaccttcctg agctccagcc agtacgtgac 420
 ctgtgtggag acctacctg aggatgangg gcagctggac ctggtggtga agtacctgca 480
 nggcgtctac cangaggtg gggccaaggt gctccagcgc accaacggcg accggatccg 540
 gttcattctg gacgtgcttc tgcccaggc catcatctgt gcgatctctg cggtggacca 600
 ggtggactac aaagacggct ganggagaag tacatcaagg ggccttcgct gagctaccgg 660
 ggaaaaagaa atatttgaca aaccaagctc ctttaaaaa ncgggaaccn gggngnccgt 720
 tccggtgaag gganc 735

<210> 4265

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4265

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gagatcgggt gctggaac tctccgtctt tgctaattgga gtcgtgactt caattcaggt 60
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cctgcttcaa tcttcaactg ctggaacatt caattatata ttattggatc gatatgtttg 180
ctacactata acccagaaca ttatgaaaac cagaaattat aattttatat ttaatatatt 240
ctaacggatg actctagggg aattgttaga ggaattgtca tgaccattgt ccagtttttt 300
tcctagattg gaacagagaa gtattaagaa gaaaactgaa attatctgta atgccacatc 360
acagggataa cctctgttaa ttttttggtt ttttttagc tctagatttc taaggatatt 420
tttctatacg tagattaaaa agatatacat atctatcttt ttaaagttaa aaagggatta 480
tattgtatag agggttttat atcttgcttt ttctctgtga tgctgggagc atttccttgt 540
aatgaaaagt tttcctaaaa ccacattcta ttgagtgaac acataagcca aggatggcgc 600
atacttgccg atgagagtcn aggccatctg tgacgatatg antggctcgt ttctttgcac 660
cttcttgttt acgtcagggc tattgaaaaa aggattgtnt taanggtaaa acgccggcna 720
aangggaa 728

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<210> 4266

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4266

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tataatgaag ccaagaaaac gctgacagag ctgaagactt acagtgagaa actggacaaa 60
gagcaagcag ccctcgagaa gatagaatcc aaagctgac caagtatcct acagaacctg 120
agagcacttg tagccatgaa tgaaaatctg aaaagtcaag aacaggaatt taaagcacat 180
tgtcgagagg agatgacacg actacagcaa gaaattgaaa acctgaaagc tgagagagca 240
ccacgtggag atgaaaagac cctctccagt ggagagccgc ctggtacctt gacctctgca 300
atgactcatg acgaagacct agacagacgg tataatatgg agaaagagaa actttacaag 360

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atacgtttac tacaggctcg aagaaatcga gaaatagcaa ttttgcaccg caagattgat 420
 gaagtccta gccgtgccga gctaatacag tatcagaaga gatttattga accctaccgc 480
 cagatttcag cagtgcacaa agaaaccaag cagttcttca ctttatataa taccctggat 540
 gataaaaagg ttatttgga aaagagatta gtctgctgaa ctcaattcat gagaacttct 600
 cacaggccat gggctcccct gctgcccggg accagttttt acgtcagatg ggaacagatt 660
 gtgggaaggg gattaagcan agnnnaatgg aagatgggaa angaaaaagc aagg 714

<210> 4267

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4267

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 ccgggctgcg gcagggcagg gcggggagct ccgcgcacca acagagccgg ttctcagggc 120
 gctttgctcc ttgttttttc cccggttctg ttttctcccc ttctccggaa ggcttgtcaa 180
 ggggtaggag aaagagacgc aaacacaaaa gtggaaaaca gttaatgacc agccacggcg 240
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 tggctgaggg aacatggctt gttggcccca gctgaggttg ctgctgtgga agaacctcac 360
 tttcagaaga agacaaacat gtcagctgct gctggaagtg gcctggcctc tatttatctt 420
 cctgatcctg atctctgttc ggctgagcta cccaccctat gaacaacatg aatgccattt 480
 tccaaataaa gccatgccct ctgcaggaac acttccttgg gttcagggga ttatctgtaa 540
 tgccaacaac ccctgtttcc gttacccgac tcctggggag gctcccggag ttgttgga 600
 ctttaacaaa tccattgttg gctcgcctgt tctcaaatgc tcggagggtt tctttttata 660
 caagccaaga aaagacacca ngcatgnaag ggacaatgcg gcaaaaagtt ctgangaaac 720
 atttncaagc aanatt 736

<210> 4268

<211> 766

<212> DNA

<213> Homo sapiens

<400> 4268

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ggaattttta ggtggtcaca ttgtaaggca tgcccaggct catcagaaaa aaggcagttt 60
tgcattgtgta atatgtggta ggaaatttag aaacagagga cttatgcaga agcatttgaa 120
gaatcatgtt aagaagatac agaggcagca aattgctgca gctcaacagg atgatcagga 180
agtcactgct ttggaagaaa taaattgttc tagttcttcc atttcatttg aaaatgggaa 240
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tattgaaaat gttattgaaa atggcagtcc taataattct ttaaataatg ttttcaagcc 420
tttaactgaa tgtggggatg attatgagga ggaagaggat gaanaagggtg attatganga 480
agatgantat gacctgaatc aagaaacttc agtaattcat aaaatcaatg gaactgtgtg 540
ccatccanaa gacatatatg ccacagatca agaangaaac ttttaagtgc ctgctcntgg 600
ttgtgtccgg atatttaaaa gaattgggtt tccaaaataa acatgcaatg acccgtagat 660
ccaaccgatt taaatgtggc gacaaacagt atgaactggg caaaggaaat gcaaattttg 720
gcaangaat ttngatccc acattntcan nacttatggc atacta 766

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<210> 4269

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4269

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aagtttcttt gaagctagag atcttcgcca gcacatgaac aaacatcttg gtgtgaagcc 60
attccagtgc caattttgtg ataagtgcta tagttggaag aaagattggt attcccatgt 120
gaagtctcat tctgtcactg agccttatag gtgtaatata tgtggcaaag aattttatga 180
aaaagctttg ttcagaaggc atgtaaagaa agctacccat gggaagaaag gaagagcaaa 240
gcaaaacctg gaacgggtgt gtgaaaaatg tggaagaaaa ttcactcagc taagagagta 300

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taggagacac atgaacaacc atgaaggagt taagccattt gagtgcctta catgtggagt 360
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 ctatgtctgt cctgtatgta gcgaagccta catagatgct cgaacactcc gtaaacadat 480
 gactaaattc cacagagact atgtgccttg caaaattatg ctgggnaaaa agacancctt 540
 cagtttcaaa ancaaaggga ctcaagtggg cacatgctgt taacatctta acancaaggc 600
 atgcaggaac aagganaagc aagtgggcct caaggaactt gangactggt gggaagtgaac 660
 aaggagaaaa ctattgggaa agcctccggg aaanctggtt ngcangctaa ctggaaagag 720
 gtttnccaa 729

<210> 4270

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4270

taggtggcag tcgcaacca tactattcgg acagatggca cagaaaccgc tgcgcctctt 60
 ggcttgtgga gatgttgaag gaaagtttga tattttattc aatagagttc aagcaattca 120
 gaagaaaagt ggaaactttg atctgctgtt gtgtgtagga aatttctttg gctccacca 180
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 gcttggtgct aataaccagg aaacagtaaa atatttccag gatgctgatg gatgtgaatt 300
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 tgatatcttg ctacatccc catggcccaa gtgtgtgggg aactttggga attcttctgg 540
 gagaagtgga taccaaaaaa tgtggntctg ctttggnttc cagtcttgcc acgggcttga 600
 aaccaagata ccattttgct gctttgggaa agacctatta agangaggct tccaatatcc 660
 gaaaccatat cattcctaca ggaaaatgga nagcaatgnc anccgggttt aaanctcctg 720
 gaaaagggtt ggaaatccca g 741

<210> 4271

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4271

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gcacaaagat agactactgt gcctcatcta atcacggatg tcaagcacga gtgtgttaac 60
acagatgatt cctattcctg ccactgcctg aaaggcttta ccctgaatcc agataagaaa 120
cctgcagaag gatcaactac tgtgcactga acaaaccggg ctgtgagcat gagtgcgtca 180
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cgtgtgtaag cagtgaagaa ttcgtttgtg tgccagtgtt ttggaagggt atatactccg 600
tgaagatggg aaaacctgca gaaggaaaga tgtctgccaa agntattaga ccatgggggtg 660
tgaacacatt ttgtgtgnac agtgatgact catacacgtt ncaagtgnnt tggangggat 720
tcc 723
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<210> 4272

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4272

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ttttgactta taaacaatgc tgcaatgaaa taattgacat atttccttgt gtacatgtga 60
gcatttccttg agatatgtat ctagaacttg aatcactggc caacaggata ttcttaattct 120
tcagtttcac cagatacttc caaattgatc tccataacat gcataccaaa ttatattcct 180
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accagccatt tataggagtt cacatTTTTT ccataccctc ccaatcctgc cttggcagat 240
 atgtTTTTTt caatgaataa caatgaaatt ttgttttggg atttgacaaa atgattctag 300
 attcatctgg aagaaaagca agtataagta agaaatttaa aaggacctg aaaaactaag 360
 caatggatat atttaaaaaat tggtagcagt agggataacc aaatatttgt taactgtagc 420
 aagaacaat gcatgtTTTT ctcactgggt ccaccttcta tctctcagtc aagccctgcc 480
 cagggtgtgg aagtcctcat agtctctcac tgtaggggtc ctctcacata gtaagaccac 540
 tctcttggag ttgaatattg gaaaagaang cttggncggg ggcaatggct catgcctgtg 600
 gtcccagcac tttggggaag ctgagtcgan cgggattgcn tgagggcagc agttcgagan 660
 cagcctggac taacatgggn gatgaaagta caaaattaac tggggggtgg tngggcaagg 720
 cctgcaatcc cagntaccg ggaaggntg 749

<210> 4273

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4273

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 aaaataagta gggcacatat aaatgtccaa agagacctaa accatttttg ctgtttcctg 180
 aggatacatg tcttttgccc ataactcttc tttacttttg tcctgtttgt cttaaaggta 240
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 tatagttttc tgtggctcta cagcaagaca tctttactga gtaataggca acctggatag 480
 attgcaatcc actacttaaa agtacaccac ctgtctttct cccagctctc tgtaaaaata 540
 aaagaacaag ccaacaaat caaaatttcc atagatttgg gcactgggtga atttgacaag 600
 ctctccact tttaagttcc taaagatggg ataaaattgg ggaanaaatn cagattggcc 660
 ttccccaaan ggaangtaat angtttcc 688

<210> 4274

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4274

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acaggaaagc gaacgagtc tgttctaata ctgcaccttc tttaacgctc cctgaatgtg 120
ccatttgtct gcaaacaatgt gttcatccag tcagtctgcc ctgtaagcac gttttctgct 180
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tgttaattgc tggctttctg tatgtcgctg atcttgaaaa catggttcaa tataggagaa 480
atgaacatgg acgtcgagg aagattaagc gagatataat agatatacca aagaaggagg 540
tanctggact taagctagac tgtgatgcta ataccgtaaa cctagcaaga gagagctctg 600
ctgacggagc ggacagtgtg tcagcacaga gtggagcttc tgttcanccc ctagtgtctt 660
ctgtaaggcc cctaacaatc gtagatgggc agttaacaaa gccctgcaac aacatcccct 720
gatgcaagca cttctctgga agactccttt gcncatttac aactcantgg nggacaacac 780
agctgaaaag ggtcataagg gagaaagggg aagnan 816

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<210> 4275

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4275

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ccttgaccat cctgagagat gtgatcctgg tgttgatgga agggaccccc aagggcgttg 120
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 tgcataatctg ggcaactgacg gtggcccagc ctgttctgtc tgtccacatc gccattgctc 240
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 tgctcttcca gtcctgggc cagctctgga agggctgtat ttgggcctaa tcctcaacaa 660
 ctgttctacc actcgcaggg gcaaangtgg tnaagccacg gnacntcaan gggggaaggc 720
 tgggccccaa cg 732

<210> 4276

<211> 558

<212> DNA

<213> Homo sapiens

<400> 4276

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 ttgccaagta ctgtcccagt tttagcactg aaagtccac atctcaggaa acccttcagt 180
 cctgcgtaag caaggacaac tggtgacccc agatcgaagc tgtgcaatta ggaaggggac 240
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 gagaantaca gtcatttgct gcaggaatca actcgtcccc tagatatcgg ttcccttatt 360
 cancaactgt ggctgctat aggagtcaat ttcttggttac ctttggtcag ggaataaga 420
 cttacttttg agttttcat ggttttccca gtcctccccg cccgccncaa caagcttccc 480
 ctctctaant gcaacaggaa ncctcctctt aaagggaang ttcctggnc tctatctcac 540
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<210> 4277

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4277

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gagtaaaacc gccgcccggg agaagactga aggagcagtt gccgccgttg gcggcggccc 60
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tccccggggg gtaataatgt taactgagtt atattgggag ctagtttcaa gatgaaatac 180
taattctaag ccagtctatc catatgggga tggggaagcc ttggcattgt cttttttctg 240
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gggggttttag tggttactct cctgcttgga aaaacaaact cagagaagta cctagaacag 360
tgtgaacact ctttcttcc tccaacatca cctgggggttc ctaagtgtt agaagaaatg 420
aaacgggaag ccaggactat taagattgat agaagattga cgggtgccaa tataattgat 480
gaatctctcc agcaagttat ccagttttcc ttgagggatt atgtccagta ttggtattat 540
acactaagcg atgatgaatc ttttcttctt gaaattagcg agactcttca aaacgcactc 600
attcagtttg ctactangtc aaaagaaata gactgggcaa cttatttta ctacacgcat 660
tgtagattga ctttggcaca cacttacgag tattcaanaa nggtcaaaca gaaaataacn 720
aggaaangat gatcaaagtg aaaaggtaca nca 753

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<210> 4278

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4278

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agcagtcagc cggccggaga cagagacttc acgactccca gtctcctcct cgccgcgggc 60
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ctgcttagac cagagcagcc ccacagccaa ctagggcagc tgccgccgcc acaacagcaa 180
 ggacagccgc tgccgccgcc cgtgagcgat gacaggagtg tttgacagaa ggggtcccan 240
 catccgatcc ggcgacttcc aagctccgtt ccagacgtcc gcagctatgc accatccgtc 300
 tcaggaatcg ccaactttgc ccgagtcttc agctaccgat tctgactact acagccctac 360
 ggggggagcc ccgcacggct actgctctcc tacctcggct tcctatggca aagctctcaa 420
 cccctaccag tatcagtatc acggcgtgaa cggctccgcc gggagctacc cagccaaagc 480
 ttatgccgac tatagctacg ctagctccta ccaccagtac ggcggcgcct acaaccgcgt 540
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 tggcaaacca aagaaagttc gtaaacccaa ggactattta ttccagcttt cagctgggcg 660
 cattacagag aaggttcaca agactcagta cctcgccttg ccgggacgcg ncgagctggc 720
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<210> 4279

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4279

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 cgaggatcatg ccactgcact ccagcatggg caatagagcg agactctgtc cccccggaaa 180
 aaaagaacaa gggctaaatt caaatcaaat tttccctgta ccctaagaaa aataattagg 240
 ccgggagatg tttgactaag tgagtaggca ttgttctgtg acggtctgag cccagacct 300
 ttcctctgga tgaatgctgt cccaggtaat gaaatgactt cacttattaa tatataggta 360
 cacagagttc aggtagatgt ggaatgaatg gggactcgcc ccgtctgccc ttgaatgtat 420
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 gggaatataa atcattgcag cttttttgta gggcactttg gcagtactca tcaaaatatg 540
 cgatgtgcag atgcttagcc agcaactccg cttctatgaa tctagccaac agaaatactt 600
 gtagaagtgt gcagctataa atgtccacaa gaggctcaga gcctcattgt ttttaatagt 660

gaacagttgg naaccaaata gatgtctgtc agtagggatg tggcagaatt gtggcatgtt 720
 ttatatgggt ataaaaagt attggangga acataaaccc aactggttgg naagaagtta 780
 acctctggga tncagnata aggtangggg tt 812

<210> 4280

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4280

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 cagttccggg caaaaacagc acgtcttaaa acttttactg ccaaccagat agatgaaata 180
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 gatgttcaga gacaagtttg ggattacctt tttggaaaag aaatgtatca ggttgatttt 300
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 atgaatgaaa ttctatttga agaataccag tttcaagcag tattaagagt aaatgctggg 420
 gctctcagtg cacataggta tttccgagat aatccttccc gaattatgct gtatcattgt 480
 tgatagtgga tttccttta cacatatagt tccttantgt anaagtaaaa agaaaaaaga 540
 agcaattatt cggataaatg tgggaggaaa actcttaacc aatcatctaa aggagatcat 600
 atcttacagg cagctacatg ttatggatga aacacatgtg attaatacaag tgaaagaaga 660
 tgtatgccan ggtgtcccaa ggatttttat agagacatgg atattgcana gttgnaaagg 720
 agaangaaaa ttcaagtaat natagaacta 750

<210> 4281

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4281

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tacaattaag	agtcctat	ttcactggat	ctactagt	tgaataaggatg	ccatatacta	180
aagcatagaa	aagttaaata	tccattccct	ataaaatcta	agaaatacta	tgacagtaata	240
tgtcataaat	tgccaaataa	taatttactg	taatacagaa	aaagatctgc	acctatgtat	300
gaaaagattc	tcagaaaact	aagaataaag	ggaaattcta	acttgataca	tcctgtgcac	360
ctcaagtcta	tagcaaaagt	tacatttcat	tgagaaattt	tgagcacaat	ttaagtaaga	420
ggagaagata	agaaagaaga	aataaagttc	actattcgta	tatgatatag	tcatttgtat	480
aaaatccaaa	acagcaaact	actagaactg	agaaaattca	gcaagggttg	tctaataata	540
gattaattta	taaaaagcag	ttgttttttc	tataccgaga	gacagcaat	cttttttaaa	600
tgttttcagc	tttgtgggcc	atatgggtctc	tgtcataact	ataactgctg	atgtagtatg	660
aaagcagctt	agacatcatg	tcaagacatg	ggcaatgcct	gtgttccaat	aaaagctttc	720
ttttagtagta	atngcaagcc	ntgggatttt	gggcctgtga	gnccataaaa	tttctaaacc	780
cccngccaat	ttatcaaggg	gggaaacccc	aacttttгна	aaa		823

<210> 4282

<211> 521

<212> DNA

<213> Homo sapiens

<400> 4282

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ttatcttatt	ttaaaataaa	cattacacta	aaaccccaca	tcatttcaag	aaatgtgggc	120
aatagtagtt	attttattat	tatacgtaac	ttttaaaaat	aacaagatag	acaaaatggt	180
tgagctacat	gcacatgaaa	agtgaaattt	acaaaaagct	taagaaatgg	atccaaaagt	240
atatttaagc	acttcctctg	aaaccctcat	aactaacana	atatgaaaaa	acaataaatg	300
tggtttataa	accagaaagc	ctaaaaaatc	tcttctaata	ctatttttat	taaaaatggt	360
tactcattaa	tattttaatt	ggaactttgc	atcatctcag	gtagaacgtg	agtctcctgt	420

cactatattt anacaagaat gtcctaaaag nttgtcnatt ttctgaaaaa tagcctctgc 480
 ttcccgaatg gttgctgctt gcttactnng aaatatgcaa a 521

<210> 4283

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4283

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 ctggacagga ctgaaggctg ctgccacctc tgcagcgctt gccattctca caccacccc 120
 tctgcccagt ttgctgcgt cgcgtgaagg atcctgcgtt ggcgccccca cctggtgatg 180
 ccgagtcctt ggggggtggtt tgctgtgact gcatgcggcg cgcagcgggt atatgtgcag 240
 gggaggagga gctatgtgcg caggggagga ggagagatgt gccagggga ggggcctgca 300
 actctggtca ctagaggttt ggggcatagg gtttggaag gccagggaagc gtaaaggggc 360
 ttctgggggt cccgaagtag cacgggaggg tggggcaggg ctggtcacgc ctctgtgct 420
 cgggcagaac aacttcgagg agccagtggc actgcaggag atggacacaa gcaacggggt 480
 cctattgccc ttttacgata ccgactccag catcgtctac ctgtgtggca agggcgacag 540
 cagcattcgg tactttgaga ttaccgacga gccgcctttc gtgcactacc tgaacacgtt 600
 cagcagcaaa gagccgcaac ggggcatggg gtttcatgcc caaaanggga ctgggattgt 660
 caagcaaagt gtnagatnn ccccggtttc tacaanct 698

<210> 4284

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4284

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attcagtcaa ggctcgtgca tttcatttag ttatatttct ttagtctctt aatgtaaaac 120
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 ccaggatttt taaaagggtg acattgccag agggaagtta atgtttctct gaaggtatat 240
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 taagttttgg cattaagtac tagagcatat attgtgtaaa tgtttccgcc agccaatgtg 360
 gctgatatct gttttaaagg tctcatttaa aatttagtgt ttttagtata agttactttt 420
 tggggacata aatatgcata tgatttggtt aaaaatttgg attgtaaata aaggtttatt 480
 tacctatgtg attcagttaa atttttaagt gttaagtggg gtgaattttg tgacactggg 540
 agaaagtttg catatcaggt atgaccttag aaagtaacaa atagatttgg tgcattacat 600
 cangcatgtg gaangataga tttgtccttc tgttcatgaa gaggtcattt acaaatttat 660
 naggagctaa actgactaag tacttgggaa atctgtactt gtaagctaata cacatttacc 720
 caaanccgga tttagnaata tanaagggtt ttaggggaat tgtttggaan ttttaaaaa 780

<210> 4285

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4285

agattcactt tgtgtttatg catgcatgca cgcgtgcaca caattctatc agcagctgta 60
 aactaccac atattttctt aatctcattt tttcagtttt tcttcatctt taaaagaggt 120
 tacatttcat tcttggtcaa ctcttaaaaa gaattatgta atgttgggcc ttcatattaa 180
 agagagagac tggttataag atcctttaca gtccattcat tttattctga tgtctaacca 240
 gatagacact agcaagcaaa acttccctct taatcctgga ccaaatgcat aattttactg 300
 tcactttcaa aaatctgtta tgactgaatc aaaatccttt taaagaaagg aaaaagctcc 360
 ttttgtgtca aatagttgaa caacatgaaa acagtatgag ccggttaaag atagattgaa 420
 tttttacttt acacatatga aaaacagtaa gttttgactg ctgtgtatgt tattcatggt 480
 aatatgtgct cagttattca ctattgttaa tccacatata atcagttgct atccctgggt 540
 agacacacta tggaacttga aatgcacaat atttacattg ttagaggctt ctatccaaat 600

atctgcattc ctttaaaatg tgaactatatt gctggtgatt aacccaaaagg gaagattang 660
 tcatcagtgg gacatttttag ntttaangga aacaaattat taagaaatgg aatagaaaag 720
 ggngtccttt cctttggggn a 741

<210> 4286

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4286

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 aatttcactt gatcatgacc gtcgctccg agaagccaca caacaagctt ttgaaaaact 180
 tatccttaaa gttaaagaaac agttggctcc ctacttaaaa agtttaatgg gagattggct 240
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 ggcttttcct ccaagcaagc aacctgaagc catagcattt tgtaaggatg aaattacaag 360
 tgtgctgcag gatcatctta taaaagaaac acctgataca ctcatgacc cgcaaactgt 420
 tccagaggaa gaaagagaag ctaaattcta ccgggttgta acttgttcct tattggcatt 480
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 cgctcagctt attttgagtt agtctctgca ttgtgccaac gcantccaca gttgatgaaa 660
 gaggaagcat ccaaagttag cccatcagtt ctacntagca attgatgaca gtgaccaat 720
 ttgtctgccc aagctctccg gggaanctgt ncncnataca cttacaacta attggaggga 780
 ctgggtt 786

<210> 4287

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4287

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agaagctttt tcatttattc gtccaagcag catcttgtac tagtcctgac tggaaattta 60
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tggcattcgg tacaatgaaa ggaaaggaag gtctgaacta attgtcgtgg aagaaggaag 180
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cttcgggaaa gtttatgtca cagagaaagt ggctcaaatt aaacaaattc cttttgatgc 660
ctcaaaatta cacaagttcc ccgcagatgg caaccangc acaatntggn gggangatgg 720
ttctgg 726

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<210> 4288

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4288

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gcttaagctg cgacgagatc taagtcgagc tgttactatt ctagagatga taaaaagaag 180
agaaaaaagt aaaagagagc tattgcactt aacactggaa attatggaaa agaggtataa 240
tttgggcgac tacaatggag agatcatgtc tgaggttatg gcacagagac agccaatgaa 300
acctacttat gccatcccca tcatccctat tactaatagc agtcaattta aacaccagga 360
agcaatggat gtgaaggagt tcaaagttta taagcaagat aaagccgatc ttatccgacc 420

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gaaacggaaa tatgaaaaga agcccaaagt cttaccatcg tctgccgctg ctactcccca 480
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 tcccagctca gacgaagaac tctctcccag gttttgtctg gctcttcgga agctgangga 600
 agacaatgat cctgatggtc cttttgcctt ccgtanggaa agcaggctgt cagtactaag 660
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<210> 4289

<211> 909

<212> DNA

<213> Homo sapiens

<400> 4289

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 agcttaataa aataaccgtc cccgccagtc agaagttgag gcagcttcaa aagatggctc 180
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 caaggaacaa gcttaaggtc caaaacagtg ggggcctggg gaaaccaagt cacctccaac 840
 aaagctncaa caatnccccg ttgccaaagg ggcccgggga aaaaaaccaa cgancancca 900
 ctggangac 909

<210> 4290

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4290

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gtagaaaacc aagagtgaga aggagttact gtgccggctg cagaagctgc acctccagca   60
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gctgcagtgc catgaggcag agctgcagca cctcagggat acggtggcct cttcaaaga  180
gagcaatgag aaggacacag agacgcacgc tcagcttcag gagatgaagc agctgtacca  240
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gtacaaggcc agccagaagg agatggggca gctgcagatg gagcagtgtg agctcctgga  480
ggatcagagg aggatgcang aggagcaagg ccagctgcag gaagagctgc acaggctcac  540
actgccactg ccaaagagtg gncctttact caagagtcag gagctactca ccaagttaga  600
agacctgtgt gaagctgcan ctgctctacc aaggcatgca aggagggaac agaagaagct  660
tgattcaaga acccaanact ggtgtattta aaangaacaa ttttnnagat tccaacgaaa  720
naagctggc                                     729

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<210> 4291

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4291

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aaccaattgc accacgaccg gatggaagag cccagctgac acaaccaaga cgagtctcag   60
tgtctaggga agcttggggg tctgctcctt ttacttcagg cgaacctgaa ctcagttaat  120
gcaattttga agcatgccct gaatagattc agtcattatc aagtcaaact aaaaacggtg  180

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aaaggttgcg actattacca aataggaaaa acctgaagac ataagaacta cacatgagga 240
 atatgtcatt tagcactttc actttttgat ctccacagaa gacaatgaga agtcatacca 300
 taacaatgac gacaacttca gtcagcagct ggccttactc ctcccacaga atgcgcttta 360
 taaccaatca tagcgaccaa ccgccacaaa acttctcagc aacaccaaact gttactacct 420
 gtcccatgga tgaaaaattg ctatctactg tgtaaccac atcctactct gttattttca 480
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 gaaattccat tcaaatttat ctacttaacg tagccattgc agacctccta ctcatcttct 600
 gcctcccttt ccgaataatg tatcatatta accaaaacaa gtggacacta ggtgtgattc 660
 tgtgcaaggg tgtgggaaca ctgttttata tgaacatgta nattagcatt aatttgcctg 720
 gattcatcag tttggattgc tatataaaaa ttatccggtc tatacaagca accgganggc 780
 aataacaanc aagcaaaagt atttaggtcc ggttgtaaan ntangggatg ccttgc 836

<210> 4292

<211> 897

<212> DNA

<213> Homo sapiens

<400> 4292

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<210> 4293

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4293

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<210> 4294

<211> 519

<212> DNA

<213> Homo sapiens

<400> 4294

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ctggggaana angtggangt gganccgccc ccagatcgg 519
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<210> 4295

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4295

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gcaaagggtg tgagccacgg gacgtccaag gggaggctgg gnccagcgn gcccatactg 660
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<210> 4296

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4296

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 gctggcangc ggncctgggc tcttctctnc ctatgtgtgg aaatgggtca ngctctccct 660
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<210> 4297

<211> 629

<212> DNA

<213> Homo sapiens

<400> 4297

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<210> 4298

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4298

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 ggttctgcac ttatcaccga gtgccccctg gaagcagatt cccattgagt tttccccacc 180
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gcctgcantt caagggctgg gantttgttt aanggaattg acctccaacc caactgcccc 720
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<210> 4299

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4299

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<210> 4300

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4300

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 aaaaatcaaa ccttgcaagt catcaaagaa ttcatacngg agangaagcc atttaaattg 720
 aatgaatgtg gcaangnct tccatatatg ncacacc 757

<210> 4301

<211> 861

<212> DNA

<213> Homo sapiens

<400> 4301

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<210> 4302

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4302

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 caggatatat aaaaaggtag attaggtcaa cctccttta agcttactct cccctcacct 660
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<210> 4303

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4303

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taaagcttta ggttccaaga agattctggg actcaggaag aaaaagtgcc atcaggtgac 180
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tggggtcact aactggttgg ttaactgagc taagaatang ctgtgggtcn cctcacttgt 600
gggccantgc tccttcggc tatacaaaat gtccaatcnc anaattttcc tc 652

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<210> 4304

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4304

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gtgaaatagc atagttattt tttgtctttt gttactagtg tgaacaaaga acggcgccta 180
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<210> 4305

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4305

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<210> 4306

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4306

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tgaccgaact gtacgtgaag gtgagagaaa agctgccaaag ctgcatttta gtcagttggg  180
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<210> 4307

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4307

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cagcagctct gctcggaag aaggcacggc ttctgctctt aagccaagtg gtcttttcaa  180

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<210> 4308

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4308

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gaaaaagcat tttaatgggt ggacacagta tttttgggna caaaaaaaaa angactcact 720
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<210> 4309

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4309

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<210> 4310

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4310

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tgtaccttgg gatttttcaa tttcttttgn atttcgatca cttctacatt cccagcttgc 600
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t 661
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<210> 4311

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4311

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 cactgggctg ccganctgta gggtttgaag ctccgctatg tttgggatta cgcangacca 720
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<210> 4312

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4312

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<210> 4313

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4313

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gaaattcttt gtggcaagtc ccaaggtcaa agtcatcagc ccacaaagta gcagtagtgg 540
cacggatctg acgggtgaca aaagcaaggc catctgcaca aggagcctgg gtaatcann 600
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<210> 4314

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4314

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gttgtcagag ttgtccaaaa atgattctat gtcaacaaca agaacctaca tacaatgtat 360
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 tataaatatt tgtcttaa atcttaccta tgatccaaat tataattacg atgatgaang 600
 atgaaggatg aaaatgcaat ggatgctgat ggggtggatgat gatngatgat caaggggagt 660
 gatgatgaat acagtganga tgatgacatg aatttggan gtganacgtg canctggcga 720
 aagtggcttg ggatgcctgg taanttaagc aacaagggca at 762

<210> 4315

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4315

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 aaccagcaaa catctccatc tgaggagctt ctattagaag accagatgag gcgaaaactc 180
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 gtctccgttg ggaatcatgc ttatgagaac aaaggtacca agcaatctgc tatggcaatc 360
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 agtttagata atgacatttc catcagagga atgtaaagac tggcatgtat ccgggatcaa 720
 ttcagaagaa cactccatta catgangatc tttgntgcct ttggcattct gacttgcttg 780
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<210> 4316

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4316

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atgctttact ctgttttgga cttttcttt tgaaaaattt tgagatagaa acctaatat 180
catttcatat atttacagca catagttaat ttgagtagag tcaaattaat cttactttag 240
aatttgatta ctaagtatta gcatggataa taatgcttct ttgcttaaa tgtaaaaatt 300
aggccgtttt actaggtgta ctttgtctta atcatattcc tttttttta tacagctgtg 360
caaccatatt gcttctggga aaaaatgtca atatgtggga aactgttcct ttgctcatag 420
tcctgaggaa agagaagttt ggacttacat gaaggagaat gggatacaag atatggagca 480
attttacgaa ctatggctca agagtcaaaa aaatgaaaa agtgaagaca tagccagtca 540
gtcaaacaag gaaaatggaa aacaanttca catgccaaca gattatgctg aagttacagt 600
gggactttca ctgctggatg tgtgggaaaa ctgcaacagt gagaagcagt ggcagggcca 660
catctcctcc gagaagcaca aagagaaggg tttccacacc ganggacgac cantacctgc 720
tgncaagcac ngccttccca acaaggctat ttcaggtatt ggtgacnagg tata 774
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<210> 4317

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4317

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aggacggggc ccatgtggtc gtcagcagcc ggaagcagca gaatgtggac caggcggtag 240
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ccacgctgca gggggagggg ctgagcgtga cgggcaccgt gtgccatgtg gggaaggcgg 300
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 tctccaatgc tgctgtcaac cttttctttg gaagcataat ggatgtcact gaggaggtgt 420
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 anaccctggc catanagctg gcccgaagga acattanggt gaaactgcct aacacctgga 660
 cntatcaaag actancttca 680

<210> 4318

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4318

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 gtggcactgt ttatgggcct ttcattggaag tgacacctgg ggttacttct gcttatgttc 180
 ctttggacag aattcagttg aatggtcata ctagaggcat tgtgccaggc tttgcagcat 240
 aaaaagaagt tagagacagg gactttggat ccaagtcctc cctgactcaa aaccagaga 300
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 gagtctacgc aacttggtt catatcagtt cttgccatct cgggatccaa atgctctcca 660
 aggcattgaag tcatttcctc caaagagant ttgangatgc cccaagaaga atctttaagg 720
 ctaanggtca ctaattcctt aaagcctaaa gggcaacc 758

<210> 4319

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4319

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ggcgtttcga catgtttgtg agatttatgg gaaactttga gaagacgtgt cttatcccca  180
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aacaagttga actgatgaga gattaccgca ttaagtaccc taaagccgac atgcagattt  300
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acaatgaatc ttgctcttc ttctgcgacg tcgacctcgt gtttactaca gaattccttc  420
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aagtatgacc caaagattgt ttatagtggg aaagttccca gtgacaacca ttttgccttt  540
actcagaaaa ctgggcttct ggagaaacta tgggtttggg atcacgtgta ttataaagg  600
gagatcttgt ccgaantggg tggctttgat gtttcaatcc anggntgggg ggctggaggg  660
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<210> 4320

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4320

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agagctcacc tgccaggcta caggttatcc tctggcagaa gtatcctggc caaacgtcag  180
cgttctgcc aacaccagcc actccaggac ccctgaaggc ctctaccagg tcaccagtgt  240

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tctgcgccta aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgc 300
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aacttggctg cttcacattt tcatccctc ctgcatcatt gctttcattt tcatagccac 420
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tctgaaacct gcaacaagga ctagccaaca cctggccatg aaacttgccc cttcactgat 720
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<210> 4321

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4321

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gataagcttt aaggtttatg aaagtatgtt tttttattta atgagtaatg tccatttgaa 540
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ttttggtttt gntttgaaac agagtctcac tctgttgccc aaagggtggag agaagtggna 660
cgcttttgtc ctactggna aacctccaac tccccgaggt tcaaagtga ntcncngng 720

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747

<210> 4322

<211> 194

<212> DNA

<213> Homo sapiens

<400> 4322

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gacatggaaa ggtgatcagg taccttatat gaaggggaaa aatttcaact tccaattaaa 180
tttannantc cata 194

<210> 4323

<211> 883

<212> DNA

<213> Homo sapiens

<400> 4323

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ccgcagcaat gccatgccac atattaagac atatatgagg ctttctccag acttcagtaa 180
aattgcttgg ttccttgta caagcgcaaa tctgtccaag gctgcctggg gagcattgga 240
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gccatggata tggaacattc cttatgtcaa agcaccgat acgcatggga acatgtgggt 480
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 cattcctaataa aaagtattaa gtccctaatt cacttttata tgttttggaa agaaaattag 720
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<210> 4324

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4324

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 gaatatgtaa gagcttttaa tgctaccaa ctggaacgag tatttgcaaa accattcctt 180
 gcttcgctgg atggtcaccg tgatggagtc aattgcttgg caaagcatcc agagaagctg 240
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 aatatagtac tgtacgatat gaggcaagct accctttgaa aaaagggtat cttagatatg 720
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 gaagnattat aa 792

<210> 4325

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4325

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tattttcttca tggatcaatat cactctttta aagctagcaa aatatgactt tcttctgagg 180
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ataactcaat gacctgaaat aataggtgct caatgctttt tcatttgatt ccttaaaaaa 720
caatttttat tccggtncaa aaaaaaaatt cccccnggcn aaaaatccca aaatggattt 780
acctggg 787

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<210> 4326

<211> 843

<212> DNA

<213> Homo sapiens

<400> 4326

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cccagctctg cgagagccag gggaaaagga agagaggcag ggaaggaaag gcagcaagta 180
caaggtgatg aatgactgca ctggccattg cttcatgaag agccacgaaa aaacagagcc 240

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<210> 4327

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4327

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<210> 4328

<211> 823

<212> DNA

<213> Homo sapiens

● <400> 4328

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<210> 4329

<211> 336

<212> DNA

<213> Homo sapiens

<400> 4329

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<210> 4330

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4330

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<210> 4331

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4331

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<210> 4332

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4332

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<210> 4333

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4333

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<210> 4334

<211> 794

<212> DNA

<213> Homo sapiens

<400> 4334

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<210> 4335

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4335

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<210> 4336

<211> 792

<212> DNA

<213> Homo sapiens

<400> 4336

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<211> 748

<212> DNA

<213> Homo sapiens

<400> 4337

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<210> 4338

<211> 575

<212> DNA

<213> Homo sapiens

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<211> 797

<212> DNA

<213> Homo sapiens

<400> 4339

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<210> 4340

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4340

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<210> 4341

<211> 740

<212> DNA

<213> Homo sapiens

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<211> 779

<212> DNA

<213> Homo sapiens

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<211> 830

<212> DNA

<213> Homo sapiens

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<210> 4344

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4344

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ttaattangt cagacatatt aaaggaatat tgcctggcct ccccnanttt ccccaaaaag 780
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<210> 4345

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4345

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aaccttgcgc tgcacccgct cgacctcgtg aagatccgct tcgccgtgag tgatggattg 300

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<210> 4346

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4346

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 tctaaagcag atgacactga catggacaaa acaagtgcac atgcatagtt gcggnagttt 780

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<210> 4347

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4347

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gcaataggga gtgagtata acttcacaca tatctagcta acccacagct acctgatgg 420
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gaggaaatga gttggatact accagtatgg aaggtctttg aacaggtttt gccctacaag 540
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cagtgatgtt acagaatatt tgtgtaagac aagccaatag agaggagaag atgacgatgc 660
aagagaatcc attgcaggag caatgttcnt gagtcagtga tangggatgg nacataatgg 720
acaagttgga gtggtgtgat cataaatcac tttgatgtaa agaccatctc atcaagaact 780
ccaacagctt tccccactg gctcctttc ataacaccaa aggnccancc tttgggggtcc 840
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<210> 4348

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4348

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caatcagctt caaacctgg gccacctttg ctgcagtgat naaattgaag ggttgaaggg 600
tgcaaacaaan ggnaacaagc aagggaaca atcctggctg gggaagaatt ctccaaagaa 660
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<210> 4349

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4349

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tggttaacttg atggggacag caatgagtct ataaattact ttgggtggta tagcagtcag 360
gcacagaaat gtccttgtgt taggcaatac cattcaggac atagccatgg gaagagtcct 420
catcactaag aacaccaaaa gcaatggcta caaaaaccaa aatttacaaa tgggatctaa 480

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ctaaacttaa gagtatctgc agcgcaaaaag aaactattat cagagtgaac aggcaaccca 540
 cagaatggga gaacattggt gcaatctatc catctgacaa agggctaata tgcagaatct 600
 acaaagaaca aatttacaag aaaaaaaaaac catcaaaaag tgagcaaagg gtatgaacag 660
 acacttacca aagaaagaca tttatacagc caacgaacat gtgaagcaaa gcacatcatc 720
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<210> 4350

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4350

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 agtggcgcag tcatggctca ctgcagcaaa acatcgacct tcccagcctc aggcgatcct 180
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<210> 4351

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4351

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ggaagagagg tagaaggagg gtgctacaca cttttaaaca accagatctc atgataactc 420
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<210> 4352

<211> 867

<212> DNA

<213> Homo sapiens

<400> 4352

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tcaaggcagt agcatttcat catgacatac caaaatactg acttatattc ttactgggat 180
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cctagcagaa ggaattgggt aaaaatatgt tcctccagga attgccctgc tgaactgact 480
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 taccctgttt gcaacagcaa ggnagtatca ctttattcac atttataaag tgtataaata 720
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<210> 4353

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4353

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 taggttttaa tggaaatcga attgttgatg ttaatctaac tagtgaagga aaggtgaaac 420
 tggttccaaa tactaaaatc cagatgtcat attcagtaaa atggaaaaag tcagatgtga 480
 aatttgaaga tcgatttgac aaatatcttg atccgtcctt ttttcaacat cggattcatt 540
 ggtttcaatt tcaactcctt catgatgggtg atcttcttgg ngggcttagt ttcaatgatt 600
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<210> 4354

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4354

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acagtaaatt agacctgcca tgtgaactgc agtttcaca atgtcttctt ctggttggtg 180
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gagaatgtta tcaactcadc aacctatcaa tactgttgaa agcgtctctt ttttcttcat 660
gggcaccanc ccatcannct gggaggttta tccaagaaaa ttttcccaa aaaggaaagn 720
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<210> 4355

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4355

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tttcacgtct ttaattctga aacttgaaac aaaaacaatg catcagtggg ccatggagac 180
ttcttcttct gtgtatggga tactgtgtct tttattcttc tattctggta tgtcctccct 240
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 ttttaagggtg cgcctaattg gctccccggt ttcctgaaac tatancaaca atttttgggg 720
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<210> 4356

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4356

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 tctcattttt ctctccaact actctctcat ttgtttctta aactcccttt tttttcagcc 600
 tgttttttgg aaccctgtta gagaagaaca gacatatatt gtccctgaaa ggtacattta 660
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<210> 4357

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4357

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gacacctgaa ccctaagaca ttttaaaatg acagtattca ttancaagtg taatgtanag  660
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<210> 4358

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4358

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<210> 4359

<211> 821

<212> DNA

<213> Homo sapiens

<400> 4359

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821

<210> 4360

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4360

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gtaaagattg aacaaaaata tgtgagtgtc aaactgtcct taaaaagtag ataactatat 180
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801

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<210> 4361

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4361

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 gaacacntaa tgctgagatt gggaatnang ncattaaatt caaacatttg ggagaagctt 660
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<210> 4362

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4362

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 ctctggtggc caggtgacct ggctgccttc cactccttgt acctcaagtc taaacatgga 660
 ntggccgctg nncaanggcg ctccaacccc aagaagccaa gcgtcttcat ggggaaagga 720
 ttnaaatgg 729

<210> 4363

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4363

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 gaggagaatg acaatgataa tgaaagtgc catgatgaag ctgactccta aaccaaagt 600
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<210> 4364

<211> 807

<212> DNA

<213> Homo sapiens

<400> 4364

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caattgccta aacctgttaa gcttcatttt ttttttcata tgtaaattgg agaatatggt  180
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ttggattttg gtgagtctaa gttttagta agtgagattg tttttagtga gctgtcagcg  540
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<210> 4365

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4365

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agtaatggga ttgctgggtc aaatgggtatt tctggttcta gatccttgag gaattgccac  180
actgtcttcc acaatgggtt aactaattta cactcccacc aacagtgtaa aagcggttcc  240
atttctccac atcccctcca gcatctgttg tttcctgact ttttaatgat caccattcta  300

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 ttcatttcat tcaccactt ttgatggcat tgtttgtttt tttcttgtaa atttgtttaa 480
 gttcttttga gattctggat attagccctt tgtcagatgg atacattgca aaaattttct 540
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 tttagnntaa ttaagatccc attcgncaat tttgggcttt tgttgccatt gcttttgng 660
 ttttattcat ggagtccttt gcccatgccc naggtcctga aaggtattgc cccaggtttt 720
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<210> 4366

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4366

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 tcagtggcac ctacatgatt taattgatga actttttaga tttaaagaat ttccttaatc 180
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 gaagatgtta cagagggata agcctattga gatgcagctc acatcagcaa aatgtttaac 300
 ttacatgtgt agagctggag caattcggac agatgataac tgtattgtat taaagacatt 360
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 tgagacactt gcctatctga ttgaaccaga tgttgagcta cagagaatcg ctagcataac 480
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 attcaagctc tatgcctctc ttggagcaaa tgatgaagac atccggaaga agatcattga 660
 gactgaaaat atgatggacc gaattgtgac tggcttgtcc gagtcnaaag tcaaggtgcg 720
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<210> 4367

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4367

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gatctatatg cactggttac tgttgcttgc cttccattcc tacccttact aatcagattc 240
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gaatgttcct cctctccttt tcttcctgga caacaagatc aaatatttct caagatcttt 600
tacagctgaa ttgggggcac atggacaggt atnatcttaa aatatnanaa antaatttaa 660
aanttacatg ctaaaatttt ataaaaaat 689
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<210> 4368

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4368

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gaaatgttgt catccgtcat accagattcc aggagagaaa atgaacttcc cgatttcccc 180
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cacattgatg agttttttac ccttaactca acaccatcta gatctgcata tgatgagcct 240
 catttgctcg taaatattga gaaacagaaa ctagagttgg aaaaacgacg actggatata 300
 gaggccgaaa ggctgcaggt agaaaaggaa cgcctacaaa tcgagaaaga gaggctgcgg 360
 catttagaca tggaacatga gcggcttcag ctagagaagg agcggctgca gattgaaaga 420
 gaaaagttga gggtacagat agtcaattca gagaaaccgt ccttgggaaa tgaacttggn 480
 caaggagaaa aatccatgct tcaaccacag gacatagaaa cagagaagtt aaaacttgag 540
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 nctgcanatt gaaaaggga cgcttacagg tanagaaaag acagacttcn aattcagaaa 660
 gaaaggcact tgcaagtgan ttttcaggc ttccatttag caaaatgttt ggaaaaacnc 720
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<210> 4369

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4369

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 tttctcctag agcttcaaaa catcattatt caagatcacg atcaagggtca agagaaagaa 180
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 gcggaagaag tctcgatcca ggagtaggga gcggnagaaa tcgagatcca gaagcagaga 600
 gaggaagaaa tcgaagattc agaagcaggg aaagaaaacg gcgggtnaag tctcgttccc 660
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tcgagata

728

<210> 4370

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4370

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tatccangaa cntaacatgg nctgcatttc taaagaanca gggttcaaga ggctttctgg 660
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<210> 4371

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4371

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gcataatttg tggtagtggg ggactgcgtt cgcgctttcc cctgccgaga gatctgagcc 180
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 a 781

<210> 4372

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4372

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<210> 4373

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4373

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<210> 4374

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4374

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aaaaaaaggg ggtgtgagtt gtgattccac ctcaacccc ggtcctgagg aacaangggg 600
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ttna 664

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<210> 4375

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4375

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gtggccgtct tctccacatt ggcacccgga gtctccatg gggccaagct ccgaagtctg 480

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caagtcgttg atctggagtc ccggaagacc acgtncacct canatgtcag tgacagtgag 540
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ccggctgggg cttgtttgac accccggcaa naagtggggc accgttggag aatcgcaanc 660
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<210> 4376

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4376

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anttgggtgg 729

<210> 4377

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4377

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ctctctcttc	aatgtatgat	ttcaaaacta	aaattttaaa	agagaagaat	aaatatctta	180
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<210> 4378

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4378

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caaaggtaaa agtgatggtt gactcaggag accggaagcg agccatcagt tctgtgtgca 420
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<210> 4379

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4379

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<210> 4380

<211> 853

<212> DNA

<213> Homo sapiens

<400> 4380

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<210> 4381

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4381

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<210> 4382

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4382

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 ccctcacata cacaactct gttctgtttc aagataatc caatggagca ccttaccctc 480
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 caagagcaag caactccttc tggttggtta ttggaaaac ctctctttac attgggcaga 600

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 tctgtcatac tatnggatgt ggcttcattt ctaaacctag caatcctgac atcctcatca 720
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<210> 4383

<211> 574

<212> DNA

<213> Homo sapiens

<400> 4383

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 aatctggcca catacgctaa gagtaaactt caattgtatt gcaaacaaat gtatcttgcg 180
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 aataactcta ttccaactg aaacactcaa tttcccaggt aaactggtaa ttcccaggag 480
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<210> 4384

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4384

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<210> 4385

<211> 709

<212> DNA

<213> Homo sapiens

<400> 4385

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gaaaggactt attcattann aagatgncca ctctgcactt tgggaaggcc gaggcgggtg 660
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<210> 4386

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4386

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aggattcctt ggnggggncc cctgggcaat gctaagtcca annaacttgc caattgtatc 780
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<210> 4387

<211> 850

<212> DNA

<213> Homo sapiens

<400> 4387

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<210> 4388

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4388

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<210> 4389

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4389

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<210> 4390

<211> 848

<212> DNA

<213> Homo sapiens

<400> 4390

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<210> 4391

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4391

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<210> 4392

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4392

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<210> 4393

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4393

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<210> 4394

<211> 845

<212> DNA

<213> Homo sapiens

<400> 4394

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gtgttcaagt	ttacatttta	aaggacgctg	tcaaaagggt	tgtgtaccaa	atattttttt	660
cctacaaaga	atgtngatga	tctaaaacca	aaactcaacg	gtgaaaaacc	aagtttaatc	720
ccaagggaca	tggttagaaa	agttttantta	caccagggtg	aagtggntac	ccaatttggg	780
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<210> 4395

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4395

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tatgaagcag ttttggcttt ttcaacagat gttggccact cacttttatg gatttcacat 360
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 aaaacctgtt gttaacacct ctctctgggc cttctttgct ctccttagca cgttcattgc 540
 taggggctgc cacttccatc ttctctgcct tggaaagcat agagtcgttt ctcaagcctc 600
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 ngcaa 665

<210> 4396

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4396

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 gcggcgctgg cggcgccct gggacccgcg gaagccggca tgctggagaa gctggagttc 180
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 agtaaaaaac aaagttttgt aggaatgcta acaattacag atttcataaa tatactacat 420
 agatactata aatcacctat ggtacagatt tatgaattag aggaacataa aattgaaaca 480
 tggagggagc tttatttaca agaaacattt aagccttttag tgaatatatc tccagatgca 540
 agcctcttcg atgctgtata ctccttgatc aaaaataaaa tccacagatt gcccgttatt 600
 gaccctatca gtgggaatgc actttatata cttaccaca angagaatcc tcaagttcct 660
 ccaagctttt tangtccgga tatgccaaaa gcctgccttc atgaaagcaa gaacctggat 720
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<210> 4397

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4397

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aacccaagga nggtgggang gttnccaatt gnaggccaaa g 701
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<210> 4398

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4398

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aaaaagtaaa ttttcgcaag aaggacttag aaatgctatt ccatggaatg agtgctgatt 60
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ttgagcagct caaaatggca gtcaccaacc taaagagaca ggctaacaag aagagtgagg 180
gcagcctggc ctatgtgaaa ggcgggtctca gtacattctt cgaagcacag gatgccctct 240
cagccatcca tcaaaaacta gaagcagatg gaacggaaaa agtagaagga tccatgacgc 300
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 ttaagtttct tttcaacctt cctctaaata ttgaaaggaa tattcaaaag ggtgattatg 480
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 ttttcaagaa atattatgct gaagtanaaa caaggattga agctttaaga gaattacttc 600
 tggataaatt gctttagaca cccatcaact tttacatgac caaaaaacgt tacataaggg 660
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<210> 4399

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4399

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 gatttgcata cttagagatt aagcccatgt tcattaatta tttagttaat tcaaaagcca 180
 ttaataaatc catgcccagc ctacgcaaca tagtaagacc cagtctctac aaaaatttta 240
 aaaattagcc agccatggtg acacgtacct gtagtcctac acacttggga agctgaagcc 300
 agaggattgc ttgagcccag gaggtcgagg ctgcagtga ccgatgattgt gtcactgcac 360
 tccagcctgg gtgagagagc aagaccttgt ctcaataaat aaaccaaggt tacttcgatg 420
 actagatact ggaggtctga aggagaagct ttaaaaatac agattgattg cttcagagaa 480
 atcctattta taattatgat ctgaacttat tctatgatta gcaaataat catctgaaaa 540
 taaaacagga gttctctccc cagacttttg ttttcagga tgggtgagttt tgggtctggga 600
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 ccagagattt gggcatctca nggatccatg aaatgctgag actaanccac taaatccaaa 720
 ttttattggc tanggnaaat ccnaaatccg gtcagtgttc cggacaagat tttaggagtt 780
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<210> 4400

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4400

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<210> 4401

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4401

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gcggtctctg tctcggctgt gagctgcgct ctccacgccg gctccgcgct ccaggggctg 180
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 aaataagatg catgctattc ctttgaggtc ctctgggtg atgacctgtg cttatgctcc 600
 ctctggttaa ntatgttgcc tgtggaaggc ttggcaacat ctgctctata tataacttaa 660
 aggaccaana gagggaaaat gntnana 687

<210> 4402

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4402

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 cccgctgggg cccagcccct actcatgggtg cccagaagac ctggctatgg caccatgggc 360
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 ctctatgagg tagatattaa accagacaag tgcctaaga gagtgaacag ggangtggtt 480
 gactcaatgg ttcaacattt taaagtaact atatttggag accgtaagac caatttatga 540
 tggaaaaaga agtctttaca ccgccaatcc acttcctgtg gcaactacag gggtanattt 600
 tagacgttac ttacctggg gaangtggga aaaggattga ctttcaagg gtgtcaatca 660
 aatttgtctc ccgggttaag ttgggaacct actgcaanaa ntactganaa ggacggacct 720
 tgcctgancc aatngaatt t 741

<210> 4403

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4403

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tcaaaaaaaaa agaagcctct cactttcagt ccaagctaata tacacctcct cctccaccac 180
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cactagcacc tgtgttgctc agaaaaccca ntctcgctaa agcaacttca agctggacca 720
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<210> 4404

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4404

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tcaccaaagt taccgcacaa tgggtccaca ggttcaccc cactgctgag gaattctcac 60
tccaactctc taatttcga atgcatggat agtgaagctg agaccgtcat gcagctccga 120
aatgagttaa gagacaagga gatgaagctg acggatatcc gcttagaagc tctcagttct 180

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gcccaccagc tggaccagct ccgggaggcc atgaacagga tgcagagtga aatagagaag 240
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 gtggaaggag gattccagac cacacctctt tcttattggc tgcattgggn gttantggca 540
 agacnaagtg gggatgtgct ccaatggggg tggttanacc ggctgttcaa agnatacatc 600
 attcatgtcg aaccaat 617

<210> 4405

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4405

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 aagctactga atcccagata caacttgcca ttagacattc agaatagaat cttgaatttc 480
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 tgggaaaact gcacantgaa nttggattgg tgaaaatgna atgtgcgnag tgatgtccgc 780
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<210> 4406

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4406

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gattctcaac ctgtnggtta aggggtcaac cngggctgac cntgacnaag aggggaaggga 780
atgg 784

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<210> 4407

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4407

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atctactact tcttccgaga ggacaatcct gacaagaatc ctgaggctcc tctcaatgtg 60

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 aaactgta 728

<210> 4408

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4408

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<210> 4409

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4409

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caggagactt ccataagttt gtgtattatg ttagtctatg aaaacgtgca aatgtattgt 720
agagactttt atgattagaa ntgcatanat ttatgaaact taaagatgaa tggttttaat 780
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<210> 4410

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4410

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gaatgtgcta gaagcactct cagaaaagaa gtctgccagg ggaggactag ggtccaaaga	180
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ctttgcagtt atccaacacc cataaatata ttccgggaaa ttaagccagt cttttcagtt	420
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ccacatagct aaaccaangg ttccacca	808

<210> 4411

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4411

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<210> 4412

<211> 852

<212> DNA

<213> Homo sapiens

<400> 4412

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<210> 4413

<211> 799

<212> DNA

<213> Homo sapiens

<400> 4413

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<210> 4414

<211> 868

<212> DNA

<213> Homo sapiens

<400> 4414

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<210> 4415

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4415

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<210> 4416

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4416

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<210> 4417

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4417

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aaaacttang gattctggc 859

<210> 4418

<211> 925

<212> DNA

<213> Homo sapiens

<400> 4418

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<210> 4419

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4419

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<210> 4420

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4420

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aggagctgct ggnacaaaaa ggccgtgctc gaacaagtgc aactggacan tccaattggg 660
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<210> 4421

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4421

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<210> 4422

<211> 646

<212> DNA

<213> Homo sapiens

<400> 4422

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<210> 4423

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4423

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<210> 4424

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4424

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<210> 4425

<211> 859

<212> DNA

<213> Homo sapiens

<400> 4425

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<210> 4426

<211> 876

<212> DNA

<213> Homo sapiens

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<211> 850

<212> DNA

<213> Homo sapiens

<400> 4427

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 ggccgaggac gtgagggtgg agggctcctt tcccgtgacc atgcttccgg gagacgggtg 180
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 gcctttgact aatgccaacc aaggaaaggg ggcgggggca aaggtcaact gctngtccaa 780
 caaagggccca acatcaatgn aaannttggg ggaatggggt tgttcctgc aattgctgtt 840

aaggaaantt

850

<210> 4428

<211> 863

<212> DNA

<213> Homo sapiens

<400> 4428

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gctcatgcct gtaatctcaa cactctgaga gactgaggca ggaagatcgc ttgaggccag	180
gagtttgaga ccagcctggg caacatagca agtcctagtc tctacaaaa taataataag	240
aagaagaaga agaagaataa atccctttta actacaataa gcagagacca gttattcatt	300
ggctatatatt ttaagattgc cagcttttca aatgcagcaa aataaatgaa aaaagaactt	360
tcaacaggga tctagaagtc agttttcccg ttgagtagat cttccagccc aatacattta	420
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gaaacaattt taaaatgacc acatattatt taattttaaa agcacacttt taagaacccc	540
atttcttatg aaaggtttca tatcgagatc atttgttatt gtgagactgt atctggtgga	600
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gatttatgac ttttttttta catcatccag ctatgggntt gggacgtggt ttgttttaca	720
atttttcttc cccaggaatc ccctanaccg gtttgatcca aangaaagta atttgggcaa	780
aatccaattg gacctagtat ggntaaatca ccagtttacc tttgtgnagg ggaagtgtca	840
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<210> 4429

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4429

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tcagtgggtg ttaactgaaa acttacttaa tagtttagaa gaaaagatga tagctgctta	120
tgaaaactca aaatgggaac ctgttaaagt ggaaaatgat atgcactgtg ctgttaagat	180
ccaagataaa aatcagtggc gaagaggcca gatcatcaga atggttacag acacatttgt	240
agaggtcttg ctgtatgatg tgggtgttga actagtagtg aatgttgact gttaaagaaa	300
acttgaagaa aatctaaaga cgatgggaag actctctttg gaatgttctc tggttgacat	360
aagaccagct ggtgggagtg acaagtggac agcaacagct tgtgactgtc tttcattgta	420
cctgactgga gctgtagcaa ctataatctt acaggtggat agtgaggaaa acaacacaac	480
atggccatta cctgtgaaaa ttttctgcag agatgaaaaa ggagagcgtg ttgatgtttc	540
taaataattg attaaaaagg gtttggcttt gagagaaagg agaattaata acttagataa	600
cagccattca ttatctgaga agtctctgga agtccccctg gaacaggaag attcagtagt	660
tactaactgt attaaaacta actttgaccc tgacaagaaa aactgctgac aataatcagt	720
gaacagaaag tggtcctgaa tttcaggagg aaaaattcta gaaccaaaga accactagan	780
ggggtataag nccaccaagn cttattccct aacaatgaac cgntatTTTT gagggcnaac	840
aa	842

<210> 4430

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4430

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aaccattaag taccatacta gtcccaaccc acttttccaa cattatttcc aattacttgt	120
ccgctcaaac ctccataatg gtctgcacca gccagatttg cctgccctca aaggcattcc	180
acctttgttc aggctctctt ccatacctga aattgccttc ctctaccaa ttaggaaata	240
tccatccttc aattccaaca tcttttTgtga atatttacta ctactaagtt ccagagtaat	300
acctttttta aattattatt tatttatttt ttTgagacgg agtttcactc ttgttgccca	360

ggctggaatg caatggcatg atctcggctc accgcgccct ccacctcctg ggttcaagcg 420
 attcagtaat acctttttta aaaacttcct gtaatcttta gtgtccactc aaatatattt 480
 atacactgtc ctgtggtttc ttttatattg taatttaatg tttacagtgc ttttattttt 540
 gggcagtgtc cttgttcctc taactacatt gtaagccact caaaggccaa aatactgtgt 600
 tacatatattt taacattctc ccagtggttt gcagtttgta gggactcaag taaatatttg 660
 tagaataaag ggaatggntt ancaagtinga tattgaagga aa 702

<210> 4431

<211> 841

<212> DNA

<213> Homo sapiens

<400> 4431

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 aatgagtgtg gcaagaccgt tggtcacaaat tcacaccttg taattaaaag gtcaaaattc 180
 acaccttgta attcatagtg gagagaaacc ttacaagcac aatgaatgtg acatggtttt 240
 taatcaacaa tcacaccttg caagtcacat tagacttcat actgcataga aatcctacaa 300
 acgtgaacaa tatgacaaag ttttcattca caaatccagc ttcaaataca taggagaatt 360
 cacactggag aaaagccata gaaatgtaag gtttgtgaca aggctttcgg gaatgattca 420
 cacgtggcac ccatactag aattcacact ggagagaaac cttacaagtg caatgagtgt 480
 ggcaaaccct ttagtgggca gtcaccactt attcaccatc aagcaatcca tggtataggg 540
 aaacttgact aatgtaatga ttgtcacaaa gttttcagta atgctacaac cattgcacat 600
 cattggagaa tccacagtga agagatctta caagtgnat aaatgtggca aatttttcag 660
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 atgtcatgat tgaggcaagg tcctcagtca aggcttcac ctaancaaana acataggagg 780
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<210> 4432

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4432

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aacagcaatg gcggaaggag aagatgtgcc gccgctgcca acgtcgagcg gcgacggctg   60
ggaaaaagat cttgaagaag ctctggaagc aggaggttgt gatcttgaaa cggtgagaaa  120
tataattcaa ggaagaccgc tgcctgctga tctgagggcc aaagtttgga agattgctct  180
gaatgttgca ggaaaagggtg attgtttggc atcatgggat ggtatttttag acttgccaga  240
acagaacact attcacaag attgcctgca gtttattgac cagctttcag tgccagagga  300
gaaggcagca gaattacttt tggatattga atctgtaatt accttttatt gtaaatacag  360
taacattaaa tatagcacat cccttagctg gatacatcta ctgaaacat tgggtgcatct  420
tcaactgcc a cgcagcgatt tatacaactg cttttatgcc ataataaata agtacattcc  480
cagggtattgt tcccagaaag ggagaccatt tcatecccttc aggttgctca tccaatacca  540
tgagcctgag ctttgttctt atcttgatac aaagaaaatt actccagact cctatgcact  600
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ggatggatat ctacaacaag cagatccatt ttttatttaa ttcctaatgg ttanttatcc  720
ttgttaaagt caaaaggaag ttattttaac ncaagaagtc aagacagcaa agaagaagtt  780
tatcaagggt cctgggaaaa tacnccatcc aagtcctgaa atatngnaan ggt          833

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<210> 4433

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4433

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ttaaccataa taatcggaag gctttataga accctaaaat atccaactat cattcaattt   60
aaaatttatc acacaaaaaa tgagttttat agaattgttc aaaaaaagcc attaaaataa  120

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ccaaaactaa aaccaagagt ttgtaggaaa ataccaatat gcaaacattc caaaaggaga 180
gcctttatatt tgccagccaa ggtggtatta ttgtcttaa aaaaaaatc aatgtaacat 240
tggttgctct ttgagaaagt tccttgctgg gattcttttg ctggaaaatt ctcatgctga 300
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tataatggat caagtaaaga gctgtcaaat aagattaaaa agactcacao ttattggaat 720
gttaaaacaa aaccctaaaa ntgaangaaa accgttaaat aaangctaata taaggtaata 780
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<210> 4434

<211> 232

<212> DNA

<213> Homo sapiens

<400> 4434

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ctgggcgccc agccggacag gtgagcggca gccaggtgag cgcgccacc tgcgcctctc 120
cgcgcgcccc gccctccccg gcgccgggct cctctccgag cccctgtcgg cgcggaaccc 180
tggcctcgtc cgcgccnccn ctccctggag cctcncatca gcgggggcgc cc 232

<210> 4435

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4435

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tacgggtgtg tgctgtggac ttgtacttca cactttttgg cctcagtaga ccttcctgtt	180
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ggnangcgct ccactccaa gtctttacta anggaatcta cagtctccaa acacagtgc	660
cancatcacc accatcacca tgnngcacaa gaaaaagaa	699

<210> 4436

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4436

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gatatatattt ttgcccatta cttttagtgg caaaaaccag aattactttt gcaccaacct	180
aatatagcta tatctacatc atctctatct ctatttatat agagatagag aaagagtaaa	240
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cctcctgaga gacagtagca gcagtaacac ctagttatgg actgaatgta tcccccaaca	360
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acaagaagag gaagagacac cagagcattc tctcaccctc cgtgtgcatg caccaaaaat	540

ggcatgtgaa cacagagaga ggaggcggct gcctacaagc caggagggag tgctctcacc 600
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 aaataaatgt ccaacggctt aaaccancca agtccnatgg gtataatggt tatggcaagc 720
 tcaaactaaa gacaacccta ataatggagc acagctatgc ccaatatacct gggnttccag 780
 atgccantcc nactaaaag aacccaaaag ttccttgaag naaatgggct ggatttcang 840
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<210> 4437

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4437

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 agagactgtt ggggaagttc atccaagtgc agggccttgt cctgttgggt ggctcanata 600
 tattaatat gacccttata caaattaaac aatgggttacc gcatttgccc ctnaactcca 660
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<210> 4438

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4438

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gacctagtat ggggnaattt atgcaaggta attccnaagg taantttaat ggnatngc 838
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<210> 4439

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4439

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gaagggcgac tactacgagg cgcaccagat gtaccggacc ctgttcttca ggtacatgtc 180
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<210> 4440

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4440

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<210> 4441

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4441

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tcacgagtac taccttggga atatgttggc caagaaacct tctaattgaa aaagaacgan 660
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<210> 4442

<211> 886

<212> DNA

<213> Homo sapiens

<400> 4442

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<210> 4443

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4443

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 aatggctctc tacttcgaat tggacctggg aaattcgagt ttgggaagga taagtacaat 300
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 aactatgtgc ggtacaaggg tgattactac ctctgcactg agaccaactt tatgaataaa 600

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 gggaactccc tttggggcaa tatgggttcc nccctaanaa gggttaatnc ggggttcct 780
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<210> 4444

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4444

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 cccattccc tttggcaagt tgagagtgtt ggttcctggc cttgacctca naaactcatn 660
 aacacaggat tgggcaataa aactaacttt tatccaaaaa ggcaagaact ttncaaaaca 720
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<210> 4445

<211> 878

<212> DNA

<213> Homo sapiens

<400> 4445

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<210> 4446

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4446

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 gaagaggaac aggggggctt cattgcaaac ctggngcctg tcccctcctt gcctgattca 720
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<210> 4447

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4447

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<210> 4448

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4448

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<210> 4449

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4449

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ctgcaccccc agtgtatcag cacttcttaa attaaaataa tcttgccaac taatgtcttg  180
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<210> 4450

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4450

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 aatgccacca aggcattctt gtactgccct cctctccctc cccaatcnaa gccaaggcaa 660
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<210> 4451

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4451

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gatgccaatc ctaatggatg ggagantttc ctaaggattc caaaaatggn aacaagtncc 780
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<210> 4452

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4452

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<210> 4453

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4453

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<210> 4454

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4454

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<210> 4455

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4455

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<210> 4456

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4456

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<210> 4457

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<212> DNA

<213> Homo sapiens

<400> 4457

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<210> 4458

<211> 860

<212> DNA

<213> Homo sapiens

<400> 4458

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<210> 4459

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4459

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<210> 4460

<211> 808

<212> DNA

<213> Homo sapiens

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 caagctttta atgcttcttc tttatataac actggggatt caatcccagt cggncgcca 660
 anattgcttg gcatggagca agcttttagcc cgcctcttcc tcagtggcat tatctaaggg 720
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<210> 4461

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4461

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tgaacggatt cagctctcag gaatgtataa tgtecgtaaa ggcaagatgc agttgccagt  180
gaaccgatgg acaagacgcc aagtcacctt atgtgggacc tgcctgatag tatcatctgt  240
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gaaccctagc cttccagctg ccaggggggt taatgaactg caaaggttcg ccaagttgaa  600
gagtcctaac cttttccaat aatcatttag gggacttccc tctggcantc tgcagtattc  660
caaccctggn aaaagctgaa cgtgtcctgc aatngccctg cgatcaatcc ccgggaancc  720
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<210> 4462

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4462

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ctgtggcatc ccattgttca tatttgccaa gtcttctgta aagatgtcta ggacgaaata  180

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ttttatgtgc taatgcatgt atttgtaaac cagatttggt taccactcaa aattaacttg 240
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 tgaaaagtct tttggtttan tcccannant tatttanttt aagaaaagta agtttaaaag 660
 accttaagga cattca 676

<210> 4463

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4463

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 ttgttggatg agttaatggg ccgggaccga aacctagccc cggacgagaa gcgcagcaac 180
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 cgatacttac agagcttact tgcagaagta gaacgtagga tcagacgagg ccatgctcgt 420
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 aaagaaagag agaagaactg ctaaggtcca caacgtcgac aattgaaaag ctttgctgca 660
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<210> 4464

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4464

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ttttgttttc agaaagtgat tactattaat ataaaccaag atttacttgt aaaaagcagt  180
gttctcaggg tttatattat ggaacagtag cttcaaatat tttgtcttat gacagtaatt  240
cacttccttt ctttttcaca gagtaagttc ctctcagttt atacagagtg attttactta  300
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agtgccacat taatagtggg tatctctgga taaaatttat aactctttct cttacttaca  420
gtgaatatat tttgtaataa acaaatcaag cttataagat tacaggtctt cagaataaga  480
ccatagatac attggtaaaa gattaataat ttctctaaac taggctattg agaaaattaa  540
tanacataaa agacaaaagc attcagctct tcgaagtata ttaagctgat tagaaaaatc  600
tgaaataggt ggcgccaaga tggccgaata ggaacaagct ccagtctgca nctccanca  660
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cctcaccngg ggggcttggc aa                                           742

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<210> 4465

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4465

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aagaatgttg aaaataatcg ctaccgtcgg cttgatttat ttcaagagca tatgtttgaa  120
gtatttgaac gagcaagaag gatgaatcgg acagattcag aaatatatga agatgcagta  180

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gaacttcagc agttttttat taaaattcgt gatgaactct gcaaaaatgg agagattctt 240
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gaacctgcag aggccaacct acanccacat atcgtctgta ttgaaagact gtgggaggat 540
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ctggctacac gaaaatttct agaaaaagaa gtttttaaag agtgactatt acaacaaagn 660
tccagttaag aaaattctag gcaagtgtgt gggcatgttt ggcaaaggaa tacnttaagt 720
tatgcccana anacttccgg agatgaggga ggttttggcc cggngaaatc caccgggaat 780
tccggccaaa aaccaan 797

<210> 4466

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4466

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tagtgcaatt tataggtgcc ataatcccta tggactgagt cagaaatggc ctaatagaag 180
gcagaagaga ggccagttcc aagcaggggc atagaacaga acaatctgca agggagttgg 240
gagcatatac cgctgggtta agacagttag tgagaaaagg ctggaaggca gacagtgtctg 300
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gaccttaatg gacagaatca agaaacagct acgtgaatgg gatgaaaatc taaaagatga 540
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tcctgtctata aaaaaatagc tttttcaagg gatgccgatt caatcatatc ctccaagggtt 660

taagaccgga ttaaaacatt ttanantcctg aaaaagcata anttcccttt gagcaagttt 720
gaaaaaaaaat gangtaattt taaaaattta aattgccaat aaaaatcccc caaa 774

<210> 4467

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4467

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gtcccggagg caggctgcct agactcacag cctcgggacc gttgccacgg cctgtcttct 180
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caggtagagc accagcttcc ctgaccgctg ctgctcgggg agggctgggg ctggccgggg 480
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tttgacattg gcccccggtt ctaccaatga canggtgccc tggctggagc tgtcaatcac 600
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atTTTTctgc acacggagtn ttngggaata agaaccggg ccaaacgctg ggccctcaac 720
ggtgnagccc tgcccaatcc ttaacgggca aaggtgggnt gggtcctggg aaagaagntc 780
cccccaaggg gggaaancna tgggtttcc 809

<210> 4468

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4468

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cagcttctca actgtcctcc aaacgcatac ccctgggntc ctttttcctt aatnaagggg 780
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<210> 4469

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4469

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cctctagtag aaagatagca tatgcttggt ttgcttggtt gggttcatca tactctattg 360
cttgggcaga agagcacata tgaagagaag agaaatggga aatggggaag acaacgcaga 420

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gcaccatatac ttgggggtgta tatagaagct acaggacaag tgtaattttt atcattgcat 480
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 ctgcaagtga tacatttggc cagagaactt aataaactaa gtcaagtggg gatangtcct 600
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 tgaaatatgt tttgatcctt tggngaaacc tttttttca tttaaacctg gtccttaaatt 720
 cccagttatg ttcccagaac aatacaanaa atgtttaaaa tgttccaatt tgtaagaagg 780
 anancaangt natttta 797

<210> 4470

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4470

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 catgtccaca attgcagctt tctatggcgg caagtccatt ctcatcacgg gggccacagg 180
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 gaagcacatc gatgaagttt atctatccgt gncctgtggg agccanaaaa nntcattgat 660
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<210> 4471

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4471

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taggactcct taaacaaggg atactgtaat cattaataga gttgatccat taggcttggc 180
acagtgttta ttttatggaa acactctaaa agaaaaacag acctgaagtt catcatgtgt 240
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gaactagacc cagattataa gtcactccag aggtcccatt tttctggatt tgagggaaga 600
agtgtttgat gacaagtatt tgnagtgant ttatatccat tttcttttaa aaagtaatag 660
nttggaatt agntacntgt tta 683

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<210> 4472

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4472

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aatatttgaa gagttctcct tgttcttcag ccagttgtct caagtgccaa ttctacctct 180
caagtgtgta tctaattgtt tccttccttg ctactgctac tacttttagcc attgccactc 240
cccatgagat tactgcattg atatgatggg gctctcctgg ttactaatct taaactcctt 300
cagtcaactt cccactact ctctgagtag aaagtctaaa atacagataa tcatgacctc 360

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ccaccatcca ccaccctgaa agtcatttta tgtctcctta tattattgaa cacaatgtct 420
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 cccacattta gggtangtcc tggcccacgc taccctttca taagtctacc aacactccac 540
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 gtacttcctg gcaaacacac atactttctt ctccaggata actcatattc aattcttgaa 660
 gacttgattc aagttttttc cccccggggg nctttccaaa aaccttcttc cccgggcccc 720
 attttgggaa antggnngtt ccccccaaaa n 751

<210> 4473

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4473

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 agaagaaagg cggaggcgat ncttccagga ttacactggg caaaaagatt acccttgagg 480
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<210> 4474

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4474

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aaggtctaca tgattacctg aagtttaata ataatgcaag aagtgtttgt gggaagcaga	180
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gtctacaaag aggttttcat acaaacataa taagatgtaa atggaccaa agtgaagcac	300
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aacttagcac ttctgctccc aagggactta caaaagtga ctttgtatg tcccgtatta	420
aaagtacttt gaactctgtt tcaaaggctg tttttggcaa tcaaatgaa atgatttcac	480
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cagaaaagag tccttttcca gaagagaaaa gtcacattat anacanagaa naagatatag	660
gtaaacgcag tccttttcaa tacacaagtt ctataaccac aaaatttggg gactcaatct	720
actttttatc aaaatcatat taattcacat ttcaaaacgt aaggggaaaa atgtctcaac	780
aaaaagggga aatggnncat ttccngggc aatcaanan	820

<210> 4475

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4475

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aactaaggaa tgtaaagtga tttttccac atttcaaata ttccatggac acctatgttt	180
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<210> 4476

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4476

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<210> 4477

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4477

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 gagtcctcag gaacttacia tcatggcaga aggggaagca agacatttct tatatggcag 180
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 tcatgagaac agcaaggagg gagtctgccc ccaagattca atcacctccc agtagacccc 360
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<210> 4478

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4478

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 attgatgaac cattgcacat caagagaaga aaagttataa aaaccagggt tcatacacia 660

gtccatggga aagtgcatac atcangacaa gcacangatt tgntaccaac ctgggaggcg 720
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<210> 4479

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4479

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gancaa 666

<210> 4480

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4480

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<210> 4481

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4481

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aataaaactt gcactcanc tccaagccca cgtgttaatc cgattcttta agtgtcacct 720
cccaaattgtg gaaaatgcat tgtctttctt ctttcccnag gccaatggg cctcaaaant 780
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<210> 4482

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4482

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gagatgggga atttcaagaa ctaatgaaat tggcacttaa tcagggaata attcatcatg 300
aaatgcaagt tttagaaaaa gaagtanaga agagagacag tgatattcag cagctacaaa 360
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<210> 4483

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4483

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acagaagctt atcagtaaca ctatttgatt gctttttgct gtgtgcacag gtgaggacct 180
gtctagactt ctatactatg tacattgtat taattttgtt cataaattag gtaattgagt 240
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caaactgtaa caacagtgcg gggattttgg tatttaaaaa gggcagagta taccaagaat 360
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 taataaagca ctacataaat atgagctcat atcatatatt tgacagtagg gcattatatt 480
 tacagggttaa cattcaatta atctgactat gaattagaaa aatcttgaat ttgttagagtt 540
 catttaactt tattaaagca atttgccaac tcagctacag aaatacagaa aatattacta 600
 tctggagaac taccagtcg taagtttacc ntcgttgaaa ttgcctaagc agaggattan 660
 gtggccaatc ctcaaggaat agtatacgaa ggnttccgc a 701

<210> 4484

<211> 854

<212> DNA

<213> Homo sapiens

<400> 4484

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<210> 4485

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4485

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tcaacagact caggtcaggt ctctcaccca ggaagcaacc actcaataaa atagagaaca 480
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gttcatgcta aagacaaact tacatgaagt ttttcagttt aagacattcc agtgaatggc 660
tgctatgtgt ttctggcact canticctaaa ccaagtctta naagatttca gaatgacctt 720
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<210> 4486

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4486

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cggttgtaagt ccgcccagct ccccaacttgc tgtgctctca ctcaatgcga agggaaaccaa 180
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<210> 4487

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4487

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<210> 4488

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4488

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gaggaagaaa ttgttgagct tccagatttg gattacctgc gaacatgac tcatatagtc  180
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attagaagaa gctattagaa gaagtcctga gggaaatggt aattaaagat nttaccaca  720
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<210> 4489

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4489

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accagccagc gaaattgcaa agctcttggc tagtgatgac atgaacattc ctaatgagga 180
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<210> 4490

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4490

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693

<210> 4491

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4491

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tttaa 725

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<210> 4492

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4492

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aaaagcgcta gggttgcaag tggcaccaag agacgtgcc ttgtcccggg gtccatttga 60

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<210> 4493

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4493

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 acgttgcgaa cgcccttttg gcgttgggtgc tnggaggtgc tgggatgggc caagaanccc 720
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<210> 4494

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4494

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 aagaacgggg ccctcaagtg caccttctcg gcacccagcc acagcaccag cctcctgcag 180
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<210> 4495

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4495

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<210> 4496

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4496

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 actctgctcc tggatcagga atgctttttt gtccctgttt ttggattttc caccatgac 180
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 gtggaaatct ccccgcatct aaggaaattt gaaaaagaca aactatggct gcttcttcaa 600
 gcaaaccacc tcaacacact atccangga taaaaccgc ttgctgctgc taaattatgc 660

caagagagaa cattctgata tttctcccca aattctaggc angcancgtt aacttggggc 720
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<210> 4497

<211> 355

<212> DNA

<213> Homo sapiens

<400> 4497

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tggcggcaag agcagacgcc cgagccgagc gagaagagcg gcagagcctt atcccctgaa 180
gccgggcccc gcgtcccagc cctgcccagc ccgcgcccag ccatgcgcgc cgcctgctga 240
gtccgggcgc cgcacgctga gccctccgcc cgcgagccgc gctcagctcg ggggtgatta 300
gttgcttttt gttgtttttt aatttgggcc gcggggaggg gggttngnng tggtc 355

<210> 4498

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4498

caactcactg atgaaaagga ataaaccaca aatgcctgca acgccatgat gaatctcaaa 60
acatgctgag ttagagagaag ccagacacaa gagtagatac tcctatacaa ttccacttac 120
atggaaatct agaaaagaca attcgaatat atagtggcaa aaagcagaag agtggttgcc 180
tggaaccagg gtgggaatga agattaactg cccagaggca taaaaaatgg ggtggtgggg 240
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aaaattaaga gcaaacagaa aaagcttaga ctaggaatct ttaatttgaa ctataattct 420

gtctactgtt tccactgagg tggctcttca gcaaatgact cagtagtttt aagcctcagt 480
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 atgatgaatg acctaancct taatgagcgc cctatgtgcc aagcactgtg ctgaatgctt 600
 tgcagaaaac gaaattcatc cttatcagat angttcctgg aacactggaa aagcactatn 660
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<210> 4499

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4499

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 tatgtttatt tattattatt attttttgag acagagtctc actgtcttgc ccaggctgga 180
 gtgcagtggc ctgaacttag ctcaccgcaa cctccacctc ccgggttcaa gcaattctcc 240
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 gccagccta ccatatcagt ttttaataac ttgaactgaa attattggct tggnaatant 480
 tgggcaggcc attaattcnc attagaaant tacttaatat ttcaaaaaat tgactaaaac 540
 tggnaatctt tggggaggcc cattttgcaa gtggaaacct gtatttatca ttaagtttgt 600
 ctttaactat ttgttaacag attttaacag ttcaaatgaa anatgttaac ganatgcnnt 660
 ttgagtccgg ggataccnca ggtta 685

<210> 4500

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4500

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cctgctcctt ggctcagtct ggcgccaccg gcatcacgga actgtacttc ccagagacgt 180
cacaccggga gacttccgat tcccgtcttt gagattggac tctcacgtgc aggagccagt 240
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attaattctt tagactgtca tcatgggtat ccgangacta atgagttttg tggaagatca 480
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gtatgctcct tttccaccgt ctttgcttca agttcaaact tggatttccg gtatggangg 600
gacnatgatt cctttgcaga atgttgnca aaaaattctt tgaatcactg tttgcnttgt 660
aaaaaaatgc ccaaaatgtt ggattaanat gg 692

```

<210> 4501

<211> 678

<212> DNA

<213> Homo sapiens

<400> 4501

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ctttctgcaa gacatccaag atcgatatga aaggctgcat aaaagttttg aaggagcagg 180
ccccagacag tgtggagggg ctgctaaatg ccctcaggtt cactacaaag cacttgaacg 240
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gatctatgtg ctgacctcag aagatgtata tgtttacata atttaataca gattgatgtt 360
aatacttgtg tatttacata accgtttcct tcttgtcact gaaatatatg gaccttaatt 420
tgtatcctga ctgactcaac ccagcagagc ataaattgac ttgagagcct tacctttgat 480

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gtctgaaatg aaacccccctt ctccaaaggc aaaattcgga gactttgatc ttgctactg 540
gagtccttta acaacaccta taacgataaa aaattcctaa ttgtttgtgg tagtatttta 600
attctanatg tggtatctct ccgggaagta tangtttata ggaaacacaa natanttgat 660
ttcccggtgt cngttcag 678

<210> 4502

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4502

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caactgttgt tatgtcagtc gaagacttag ccagctatca agtcatgatc cgctgtggag 180
aagacattgc aaaaaatact ggctgatatc tgaggaagag aaaacacaga agaatcagtg 240
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tgctattaaa aaggcctggg atgatctcaa gaaatatttg gagcccaggt gtcctcggat 360
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aaaggggccc aaacaaaaaa tggcnagtttt tctaaccaaa tgtccaaacc aaatgggctc 720
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gggnttta 788

<210> 4503

<211> 857

<212> DNA

<213> Homo sapiens

<400> 4503

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ctccgcgcgc gcgccctgtc cccgcggctt ggcgggctag ggcaggggaa atgttgcagg 120
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tgtactctca gctggaacgg caggcctggg ccagtcttca gagacctgag attaaacttg 240
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gaattttgaa gagtttaaata agtatgtgca ctgaactgag tatccactg gcacgaaaga 480
ggccagttgg agaacagaaa gaacttctta ataatggaa tgaaatggga actgatgaac 540
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ttgtgggaac ttgggcttaa aattattagg gacaaactgg ggtatnagaa tgaattccta 780
caciaagtn ggcctcctggn aaactttttt gaaaaattgn gcaatgttac gntttttggg 840
gccaaaaaaa ggttcct 857

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<210> 4504

<211> 411

<212> DNA

<213> Homo sapiens

<400> 4504

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attaatatat gaagaaaact gaacagtcct taatctgtgt aggcattaca tccatttgta 60
ggaggtatatt ggtgacttgg tacaggtttc ttgttttgt gtggtttgtt gaagatgcaa 120
tgaccgggat gaatgagtga acagctgggt gaggcagggg atgggcatta tgaagttggg 180
ggatatattg tagatgaaac agatgaccct aaggaggtaa tgaggggggtg gactaaagaa 240

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tgacgaatgg gagaagggaa aatattgaat tcattcttagc acaagtatat catcctttga 300
agaataatcc aaaacacatt ccagacatta attgtgaaat tcctgaaaaa tgtgggtgtg 360
cttaacatct cccangctat ggtgcaagca gagatgatan tgttgcttta n 411

<210> 4505

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4505

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cgggagtgca ggcctgagtg ttccttcag catgtcggag ggggagtcac agacagtact 120
tagcagtggc tcagacccaa aggtagaatc ctcatcttca gctcctggcc tgacatcagt 180
gtcacctcct gtgacctcca caacctcagc tgcttcccca gaggaagaag aagaaagtga 240
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ggtgaatcaa cggaatgtac caggtattga cagtgcatac ctggccatgg atacagagga 360
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acaaccaatc ttcaatccaa gccacaaacg ggactcatca aagaattggg gtcctgttgg 780
gntccctggn caaccaattc aaacaaatca atgggtgtaag aacctttttc caagaaagag 840
ccnncaggna aatcc 855

<210> 4506

<211> 768

<212> DNA

<213> Homo sapiens

<400> 4506

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tagggtttaa cattgaaata aaatggatct gccagcaaag ggatggaatg tgggatggta 180
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ttcggcaaaa gcagaacaaa tatccgatac tatttttaac tcaaggaaaa tctgagattt 360
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atgattggat gcctgaacaa ccaaataat tccaaagtgg gagcaattgg gaacgcctga 660
aancaaggaa ttgcccaaaa gccttaaaga ancctgtttt ggggtcccca actggttaan 720
ccgccttttg gtcccctcca aacnnttttg nggttggggg ggaantcc 768

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<210> 4507

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4507

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gaggacatgt acatattctc agttgataga gaatacttgt cctgaaagt cttcatgtcc 120
tggaggggact cagaggtctc atggttcaaa gattcaggtg gttctgagac atgatctgtt 180
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aatagtgggt ctttgttact ggaccctga ctttaaaaaa ggaagttctt tttatttatt 300
attattatta ttaattcaa tcctccaaga catcagaaaa aagagggagt tcttgaatat 360

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cttttggctt agttattatt tgatttcata tatcatctca gatttaccta aacttggata 420
aatgtaattc atatacttat ttgataaaaa tgtcntttta aaaattttta ttcaccaaac 480
tacttcagga aataaaatgt ttccttaaga aaaaatatgt ttagtaatgc gttttcncct 540
gaaaataaca gggtaaaaaa gntcncctta atggatgcca gggtaataag gcaagtttaa 600
gctcctttca aaaccctaa anttgggggg aaagaaattt ggncccnttg gg 652

<210> 4508

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4508

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gagccacaaa atggagaacc tgctgaaatt aagatcatca gagaagcata taagaaggcc 120
tttttatttg ttaacaaagg tctgaataca gatgaattag gtcagaagga agaagcaaag 180
aactactata agcaaggaat aggacacctg ctcagaggga tcagcatttc atcaaaagag 240
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anggaatcat tctcaagcca ccgcctcctt gagaccttan ggctgggaat nccagattga 720
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<210> 4509

<211> 840

<212> DNA

<213> Homo sapiens

<400> 4509

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cacgaagccc tcagcattat tgtggatgaa tataaggcac tactgcagtc ttcagttaag 180
caacaagtag aagctattga aaaacagtac atttctgcaa ttgagaaaca ggcacacaag 240
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caggaaactg ttaaggcagc aataatagaa gagcagaaac gaagtgaaaa ggctgtggaa 660
gangcaatga aaaagaacaa gagatgaatt tgatagagta tataaaagaa cagaaaaggc 720
tcgattaagt catcccgcca aagaagcctg tccagtttgg aactggtcct ccccngtgc 780
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<210> 4510

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4510

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agccgcctgc tagtggcgct gctagccggc cggcgcaggc tgccgagcgg gtgagcgcg 60
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gtccgcgcgg ctgctgcgag cggtgatcat gggggccccg ggctcgggca agggcaccgt 180
gtcgtcgcgc atcactacac acttcgagct gaagcacctc tccagcgggg acctgctccg 240
ggacaacatg ctgcggggca cagaaattgg cgtgttagcc aaggctttca ttgaccaagg 300

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gaaactcatc ccagatgatg tcatgactcg gctggccctt catgagctga aaaatctcac 360
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gtcctgggat attaccaaga aaaaaagggg gtgcttgga aacaattctc ccgggaacaa 720
gaaaaccaa caaggatttt gggccctaag gttntaatgg ctttcctaa caaanaccta 780
aaangnttnc caacaaaagg gaa 803

<210> 4511

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4511

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gccatctacc tcttctcttc tctgtgccag gcaaggagca gcaaatgagc ccaggtacac 180
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aagggatatt ttatncctt tatttgggac gcttgtttct tcaagctcag tttaactact 660
gctttgacnn tggactggct cgttaaaaca ntatncacca agagttcaag gaa 713

<210> 4512

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4512

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cagccaccat cattttgtat ttcatccac tgcggtacat cattttaatc tggggcataa 360
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ttgcnnanag gggcanccca ncgaaaaagc aacaaacccc aaagactgtg aaaagact 778
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<210> 4513

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4513

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tatcatggac ttcaacgtga agaagctggc ggccgacgca ggacacttcc tcagtcgcgc 180
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 aactgaagtg ttattgcagc caaatccaaa tgccaggata gaagaatttg tttatgagaa 360
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 tgatgcaggg actgagtttg gcccaggaac agcttatggg aatgccctta ttaaattgtg 480
 agaaacccaa aaaagaattg gnacagcaga cagagaactg attcaaactg caagccttaa 540
 atttccttac tcctttaaga aactttatag aaggagatta caaaacaatt gctaaagaaa 600
 ggaaactatt gcaaaataag agactggatt tggatgctgc aaaaacgaga ctaaaaaagg 660
 gnaaaagctg cagaaactan gaaattcatc tggaacaagg aattaagaat aactcaaaag 720
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 tcaagnaagt tacaacaatg gccaatcaa accttcgnct ggtc 824

<210> 4514

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4514

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 gtctcctcct tccatgccta caaccgcatg accccacaga acttggccgt gtgcttcggg 180
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 ggccttgcca gtgcagtgga cttcaagcac cacatcgagg tgctgcacta cctgctgcag 300
 tcttggccag atccccgcct gccccgacaa tctccagatg tcgcgctta cttgcgaccc 360
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 cgggcgggac ttcctgccct gtgggcggga tttcctgtcc ggggccaaga ctacgaccac 540
 gtgacgggca gtgacagcna ggacnaggac naggaggctg gcgagccgag ggtcaccggt 600
 gacttcgaaa gacgacttcg atgcgccctt caaacgggca acctgaatct caaagacttt 660

ganggccctc atcctgggat ctgggagaaan agaagctctc caaagcaaat tcaaanttgt 720
gcctccngaa gccaagattg aaccgggggt ggggaacccc cggggttang taaaggggac 780
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<210> 4515

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4515

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ggagtgaagg agcgggagtg gcagatggag tctctcattc gttacatcaa ggtgatcggt 180
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cagcaccttc cctgtgcacc ggcagaagct gcagggttt gtggtcggct acaatggctc 540
caagatcttc tgcctccatg tcttctccat ttctgccgtg ggangtgccg cantccgctc 600
ccatgtacca anttacctgg ataagaaact gttcaaggn ancc 645

<210> 4516

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4516

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aagcccccg ggctaaaatg gaagcacctg cgggatacag tggagctaca acttctgaag 120
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 accagagaga agctggaccg cattctggcc gttatccaag gctcccatca gaaggccctg 540
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 gaggcctgat ncggcccaat gaacaaagtc ccccgatgct gataactggg naatcccgat 660
 gcctctactt tgcaactccg ggaaattcct cttaaaaggg tgcaattgca atggcattga 720
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<210> 4517

<211> 916

<212> DNA

<213> Homo sapiens

<400> 4517

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 ctaagtgctt ttagtaggta gcaatcaaat ggtgtaaata aggatgttct tttcctgttc 180
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 cangccctct ttctctgttg gtctcaagaa cagcantggg gaccattgag cacttgaatg 480
 gnetgtttgt ccaagggtt gcaaaggaca agcaagagtt canagagctc aaggatagaa 540
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 aggagggttt taaagtccag aagggggaatn aatctgggaa gggcccgggc ttttgggtggc 780
 aaagcctttt taacaagccc ttcctgcaan ntgggtccct taaccctgg gccttggtac 840
 aattgggggg aaaangggcc taatggtttt taaaacaaaa gntggctttt aaaaagggcc 900
 ctctgaaaa agtttt 916

<210> 4518

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4518

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 cccttggatt tcaattgcat tgtgcaataa gcaaagaagg gttgataaaa gttcttgatc 180
 aaaaagttca aagaaaccag aatttttagac agcaagctaa ataaatattg taaaattgca 240
 ctatattagg ttaagtatta tttaggtatt ataatatgct ttgtaaattt tatattccaa 300
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 aatttgaaca atgcatagat gatcgaaaat tacggaaaat catagggcag agaggtgtga 480
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 tctcactggt tttccgtgct gatagtaccc tttccaaggt gaccttcagg gggattaacc 600
 ttcctagctc aagcaatgag nctaaaagga gccttatgca tgatcttccc acatatcaaa 660
 attaactaaa agggcactgg aagtttggca atttttcctg ccctgctcct gccnaaganc 720
 nttttttttt tttttaactt tcaattanna accatattat 760

<210> 4519

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4519

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agcaccatga gaatacaata gaatggtaga gtgactgact taagctaata ataacattct 180
aagattaatt gaaacataaa tgacccccag acaaatatc tgagtgacaa aaattctggt 240
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taaaactagaa ggggtgctaga tatatgttca gtgatgatta gaatcttaac attaaacaat 480
tattgtttta aagcaataaa tctgggctat attctgtcca tggctcatat gtatttaaaa 540
agaatggaaa gaattttgag agtaaatttt ttgaatgtta ttttcctttt aaattggnaa 600
cttaaatggg gttatcctta aagacatggg tggggaacca ctggnanang gaaatcnaat 660
acccaatgg cctttggaga aaatttgta agcctacatt aattgggntc 710

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<210> 4520

<211> 208

<212> DNA

<213> Homo sapiens

<400> 4520

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agtgcgtgag ttggtggcg gccggctgtg cagagacgcc atgtaccggc tcctgtcagc 60
agtgactgcc cgggctgccg cccccggggg cttggcctca agctgcggac gacgcggggt 120
ccatcagcgc gccgggctgc cgcctctcgg ncacggctgg gtcgggggcc tcgggctggg 180
gctgaggctg gcgctctang tnaaactg 208

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<210> 4521

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4521

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agatttaccc atatatttat catttttttg tatctcttct atacctccaa acttccattt 60
ggaataattt accttctgcc tgaaaggact ttgtcatttc ttttaataaa ggtctgctga 120
taagaaattc attcaagttt ttgtctactt ggaagtattt atttcatgat cactcttaaa 180
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gatctcattt ccattgggtat ctgttttccc atgtttctgt tgagtagttg gctgtcaaac 300
taacaaatgg tcatttaaag ttaatctacc acttttcctt tggctgctct tgatatttct 360
ccttgtcttt ggtttttgca gttttatttt ttgttgactt ttttttttaa tcttgcttgg 420
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tcccatatga tgaaatttct cacaattcna atttcngta tcncttggct gccctaagcc 600
tggggttgcc tgggaaagca a 621

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<210> 4522

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4522

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ggagaacttc cccaacctag caagacaggc caatattcaa atcagtaa atcagagaaca 60
ccacaaagat actcctcgag aagagcaacc ccaagacaca taatcatcag attcaccaag 120
gatgaaatga agaaaaaat gttaagggca gccagagaga aaggctcggtt tactcacaaa 180
gggaagccca ttaaactaat agcagatttg tctgctgaaa ccctacaagc cagaatagag 240
tggggggcca atatttaaca ttcttaaaga aaagaatttt cagcccagaa tttcatatcc 300
agccaaacta agcttcatta gcaaagaaga aataaaatcc tgagagacaa gcaaatgctg 360

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agcgattttg tcactaccag gcctgcctta caagagctcc agaaggcagc actaaacaca 420
 taaaggaaaa accagtagca agccactgca aaaacataac aaactataaa gaccaccgac 480
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 atcagattaa cacataacaa tattaacctt aaatgcaaac gggctaaatg ccacaattaa 600
 aagacacaga ctggcaaatt ggatagagtc aaaatccatc attgtgctgt attcaggaga 660
 cccatctcac ggtgcaaaga cacacatagg gctcaaaata aagggatgga gggaatattt 720
 accaagcaaa atgggaaagg gaaaggaaaa aaaagcaagg gggttgcaat cctaaggtct 780
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<210> 4523

<211> 575

<212> DNA

<213> Homo sapiens

<400> 4523

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 aatcaccttg ctgaggaagc ttttcgtctg ctgattcttc tttgtgacat cggggaataa 120
 ggatttatat ctaacagtct tgggggctcg tctgggatca cccagtctcc ttcgggtcgg 180
 ggtctctgat tcccgcccc ccaccaaggg gaggcgcccc actgccttac tgcggtggcc 240
 tcagggactg ggaatccgga cttacctgtt gtgatgaata aaccgggacc ctcagcaacg 300
 tggaaaacgg cgaataggct tgcatcgcac tgcctcgggg accaagataa actctgttca 360
 cagagcaaag taaagaaacg tcccaagggt gcgacaaagt acttgcttgg tggctcnggat 420
 attctggagg ttaaaagtgt gtgtgaatag tcacaagcct cactgcagct gggtgttgct 480
 tngntaaatc atgntaaagt cctactgctg ggacccgagc cgaagtgagt cctgcctgcg 540
 gttccgttng ntacctcat acggcttaag ggcgg 575

<210> 4524

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4524

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ttggtgatgt gcacgtttct gaatttcaag attttttttc tgtgtccttc agggagaata 60
aatttctata tagtgtcaag atgctacata atgggataaa gaattatagt taagtgggtg 120
aatctcattg tgctttttgt actgtgtagc ataataccaa attcctctat tcactaaata 180
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aaaggagaac cgaatttgaa cactgacctt gtcattaact anctgcatgg cttgagcctt 660
atcacctgtc agggatttca agcttccccct atttgcaaaa tgggaagtan naaggctgtt 720
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<210> 4525

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4525

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aagatatgta ctgcaggccc agatagataa ggagagtgat gaagtgaacg aagggggaact 180
gaaggaaatt aagcaggaca tctcaagtct ccgctatgaa ctccttgaag aaaaatctca 240
aaatacagaa gacctagcag aacttattag agaacttggg gagaaattat ccatggaacc 300
aatcaagag gaaaccaata gataatgcga agacttcctt agaaattcat atttatttgt 360

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ccacttgaag ccatattatt ttctgattta ttttcttaag tgccaatggg cccacctttt 420
 aaacaagaaa acgttaaata acttgggcca tcctatcatc tggagcccta gtatctaatt 480
 tttttggtga ttaaactcca ttgttcaagg taaaggctgt agataatgag ggaaaattat 540
 gccagttgt ttggtgcttg ttttaaaaac tggctttctt ggatataact aactcctgtg 600
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 ttgaccacg tttacctccc ccatggcggg ttttttccct ccngaagggt ttattttcaa 720
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<210> 4526

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4526

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 cctcttgcag gtcaaaatac tatgtacata ccacataaac actagggtat ctgttaaata 180
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 tcaactaaag gtccncctt cctggggggg acccanggcg ttaaaatgaa atttggggag 480
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<210> 4527

<211> 418

<212> DNA

<213> Homo sapiens

<400> 4527

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gcctcttgcc gccgcagcag cagcagtacc ggcatcctcg gctcgcgctc gctaccttcg   180
cccgtccgc gcaatctggg tgccgccggg gagcccagcc cagcgccgga cgcgtagtca   240
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<210> 4528

<211> 590

<212> DNA

<213> Homo sapiens

<400> 4528

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gaatttaggt ctgaaggctt aattagattt aagttaaact tttttttttt tcttcccaa   180
gaataattta tacaggatgc tgtttcatac tgcttaaag cacatgacaa atgtagact   240
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accacttgaa gtcaggaatt cgagaccagc ctggctcaca atgatgaaac tccatctcta   480
ctaaaaatac aacaaattag ttgggcatgg tggcgcatc ctgtaatccc agctactcac   540
gaagctnatg cangagantc acttgaaccc tgnngaggca anagattgca   590

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<210> 4529

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4529

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ggccactcaa ggacccccctc cgggctgttt tcnggacctg gggggaaggg gatatgatgg 660
ganaaccang ccanttgggg ggctggtcaa 690
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<210> 4530

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4530

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agcggcacgc cacagcagag gaggtggagg aagaagagag ggaccggatc ccaggccccg 180
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attttagaac aagacattta atgcaggact tgagaatgtt gatgcctcat tctaaagcag 300
atactaaaat ggatcgtaag gataagctat ttgtgattaa cgaggtttgt gaaatgaaga 360
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actgtaataa atgcatctat tttgaagcta agaaaaaaca ggatctctat atgtggtaag 420
agaatgtatt aagattttgg ttaaactcat ttaagtggat ttgttcnttg naccttttat 480
gttatagact cctaagtgtt catgttaang gttgagaatg aagcaaactt ttggnittca 540
cnaaacttg 549

<210> 4531

<211> 619

<212> DNA

<213> Homo sapiens

<400> 4531

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tgcacccaaa gtcttttatt tactttttta actacagcca cactttgagc aggtatggaa 180
cacaatcatt gattaatcta atatatacaa tagggagAAC cgtaactaca gatttacaga 240
ttgtggagct gcagcagttt ttcagtaaca tggtggagga acaccagagg atcagagttc 300
atgccaaact acagacaata aagaatgaaa atctgaaaaa caagaagcta agtgccagga 360
tagctgcgtg gctaaggnga aacacatagc ttggggctat ctttcagcac tcctcctgca 420
tattaaaatg tagtttgntc acaagttttg ncctccaata ctttgtgagt ccgggaaacc 480
acacatttta ttggatttc aagtcacatt tattactcag agtgccaatc ctncanaat 540
gtcatgtttg gncctgaagg tgggtgantg ctgacaattt tgccaatgct gctgtatttc 600
tgggaaagat gtcacntca 619

<210> 4532

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4532

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 attcttggtt ctcttttcta accctcagtt cttggaggac aagataccct ggtgatttaa 600
 aatattattt tagtcttggg gaaactaaat ttcaatttat taagtttttc attattcnaa 660
 gacttcttcc tttgtataaa cttacttgca anatgggntg aaaanatanc ttgaaatttt 720
 aatgaaaata gaaattcaag tg 742

<210> 4533

<211> 516

<212> DNA

<213> Homo sapiens

<400> 4533

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 gaataaaaaac aggggtggagg ggacaggaat ggatttttga caaatttaac tttggtatca 180
 tataaatgta taattataaa taaatgaata agaagtaatc tctaaaaatc aaaagcacag 240
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 aagtattaat ctgaaagtat taatgtntaa tacaggatga aacaaataag taactggtaa 420
 tgtcatggga ancaagattt tcagcaaaga aagntaaaat attaattgta ngggtttgca 480
 naacttattt aaaaccaa at ttggantggg aatata 516

<210> 4534

<211> 368

<212> DNA

<213> Homo sapiens

<400> 4534

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ctctggatcc cgccggctcc ccaaggctga aggagacaag tctggatccg caggagcccc 180
cagtaagaac agcagccgcc tggggggccg accatgtatg tgtacagctg gccgccgccc 240
aaacagggcg tctggccgcc gccgccgcag ctgctcacct gcacctacct ggccgcccct 300
ctgctgctac ccccantcca ggcccacanc ttccgcagcc ggcccgggag cctgcatgcg 360
ggcgantg 368

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<210> 4535

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4535

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ccaaggctga ggagctggtg aatacagcac cactgactgg agtgccccag catgtccccg 180
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aacccgctgc agaggcgctcg gatgaggccg anaggcgcg ccgtaggctgc cacctgcagt 540
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 gccgcctcac gcacctgctt gggccccgac tggctgctan aacgtgtcca actccgtggc 660
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<210> 4536

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4536

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 ctgttttcac accactgagg aggccaggca tgcttgatcc aaagcagaat gtttcacctc 360
 cagatatgtc agctttgtct ttaaaagggtg atcaagctct ccttgagggc attttttatt 420
 ttttgaacat ttttagccat ggcgagctac ctctcattg tgaacagcgc ttcctccctt 480
 gtgaaattgg ctgtgttaag tattctctcc aagaaggat tatggcagat ttccacagtt 540
 ttataaatcc tgggtgaaat tccacgatga tttcgatttc attgtcaggc tgcaagtgat 600
 tctagtcaca agattcctat ttcaaatttt gaacgtgggc ataaccaag caactgtgtt 660
 acaaaacctt tanagattta ntcaccccaa ccaanggaac tnggncacct atccactgga 720
 agtctgatga ta 732

<210> 4537

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4537

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aaaaattact atgaagtact tggagttacg aaagatgctg gtgatgaaga tttgaaaaaa 60
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gatgctttta aaaagattgg aaatgcttat gctgttttaa gtaatccaga aaagcgaaaa 180
cagtatgacc tcacgggcaa tgaagaacaa gcatgtaacc accaaaacaa tggcagattt 240
aatttccatt gaggttgtga agctgatata actccagaag acttgtttaa tatatttttt 300
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cagttgatgg tctctaatec tccttattcc ttatatccca gatctggaac tgggcaaact 540
attaaaatgc aaacagaaaa cttgggtgtt gtttattatg tcaacaagga cttcaaaaat 600
gaatataaag gaatgttatt acaaaaggta naaaagaagt gtgggaggaa gattatgtga 660
ctaataattc aaataactgc tggaaaagaa aggcaacaan nnacagatat gcagtatgca 720
gcaaaaggta taccggtgaa ngatcgactc cgaagggaag gnaaatg 767

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<210> 4538

<211> 645

<212> DNA

<213> Homo sapiens

<400> 4538

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atggaacagc ggtagctga gtttcgggcg gcgcggaaac gggcgggtct ggcgcccaa 60
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ctaaaggcag cccaggtctg gctaaagcgg ttcctggtat ggaaacctag gcccgcgagt 180
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acaccatgga acacagccat tcctctgccg tcgtgctggg accagtcttt cctgaccaat 300
atcaccttct tgaaggttct tctctggttg gtcctgctgg gactgtttgt ggaactggaa 360
tttggcctgg catattttgt cctgtccttg ttctattgga tgtacgtcgg gacacgaggc 420

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cctgaagaga agaaagaggg agagaagagc gcctactctg tgttcaatcc aggctgtgaa 480
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gcagggagat angaccanc tgtgctgtca tgcagctaac ctctgatgtg gtcttccctca 600
acattggnta tggattttgn tticaagtgt atangactaa aggca 645

<210> 4539

<211> 507

<212> DNA

<213> Homo sapiens

<400> 4539

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gcggtgggca aggaggggaac tcgagagcag cctccatggg cacacaggag ggctggtgcc 180
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gagctctcgc cagcagttag gacagggcaa gggcctccct tgtgctgaag cangtgccag 360
tgctggacga tngctccctg gaggacttca ccgatttcca agggggcaca ctggcccaag 420
atgaccacc tattatcttt gnggcctcan tggacctgtc canattcccc angccgaggc 480
cttgctccat gctgactgca ntgggaa 507

<210> 4540

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4540

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atgagagaga cccagccata gaatgatttc agttaagagt attctatgaa gaaagagcag 180
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 gcttctaaga ttctttccag tggaatttca gaaattttgt gattctatctt cattaactcc 300
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 aggtttaata gtgagacaag accaagaact acatgccagc tccattgttc aatttctgtg 420
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 ggaaagaatc taagaagcta ttgcactggc ccattcaaac attggttaga gttgcatgtc 660
 ctgctgtgaa aagagagatg gcagagacct gtgcaagaaa ccnttgtaag acagatnagc 720
 aggaanctcc tgctnccatg ganggtcaaa ggggtcaaat tgtaagcag ttaa 774

<210> 4541

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4541

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 aaaaaggaca tccagtcct ggtggccaca gatgttgtag cccgtggtct ggacattcct 180
 tcaattaaga ctgtcattaa ctatgatgtg gcacgagaca ttgataccca cagcatagg 240
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 gacagcaatt ttgctggtag cctgggtcgg aacttggnag gagccaatca acacgtttct 360
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 gggaaaggaa aaaagctgaa cattggtgga ggaggcctan gctacangga gcggnctggc 480
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 acagtacaag agtcactttg ttgcagccaa gtttaagtaa tcagaaggct gggaaattct 660

gctgctgggg caagttgggg tgggactagt gcaggagct ttgaattctg tttccaanta 720
aactcaagca naacaggggc cantannagt 750

<210> 4542

<211> 608

<212> DNA

<213> Homo sapiens

<400> 4542

agttccctca agcgcccgta gcttcggcgg agtctgcgcg atgggcgacc cggaaaggcc 60
ggaagcggcc gggctggatc aggatgagag atcatcttca gacaccaacg aaagtgaat 120
aaagtcaa at gaagagccac tcctaagaaa gagttctcgc cggtttgtca tctttccaat 180
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gagatcccaa gaaaaggga tttttattta atgcaattga aaccatgcc tatgttaaga 540
aaaaagcana ttgggccttg cgatggatan cangatagaa aatctacttt tgggggaaag 600
agtgggtgg 608

<210> 4543

<211> 414

<212> DNA

<213> Homo sapiens

<400> 4543

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acctcctata atattgaaac agattctgtg ccctttaag gagataataa ctaacatctg 120

gggagcgctt tacaatttag aaaaggcctt tcacacacag gcctgtttca tcttcacaac 180
aatcttataa aacagatata ttgttcccat ttcccaaata atgaaacgga agcgccgaaa 240
atatctccta tagggctctt caaactgtgg tcaacttagt aaatgatgtt gacagtggaa 300
gtgtgatcat tttattttcc tgcctttgga attgaagatt gtaattttgc aaaaattttg 360
ttgaagatga tgtacctttg ggtcaganan ctggagtaca atggnaccat ctca 414

<210> 4544

<211> 553

<212> DNA

<213> Homo sapiens

<400> 4544

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gcatcagact ttttccaaga gactttcaat tccagcagat acatggccac aagagctcta 180
cagggtgtct tggccatggc gccctggtgc tgcaactcct ctccttcatg ctcttggtg 240
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tgggtgagtt gccaagagaa atccaagctg caggagatnt accaaggagc tgaccggct 480
gaaaggctgc aattgggtga nttgccaaag aaatccaagc tgcanggaga tttancaagg 540
agctganccc ggt 553

<210> 4545

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4545

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 tacaccgaag atgatttcta ctgccccgtc tgtcaggagg tgctcaaac gcccggtcgg 180
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 tgtaacngtg aaaagagaat ccctgggttg aacnttaacc tttttggtaa tnataaat 840
 tggaattttt caataatnaa gttgcctttt gaaaatttgg ng 882

<210> 4546

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4546

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tgtccactct gacaaactga agatggggac tccactcanc ttcgccagcc acaggnggan 480
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 cccctanttt tgctcttccg gggcctgggg tgctcccggg ggctcaaggg tgancgggga 720
 gaccctannt accgggn 737

<210> 4547

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4547

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 gcactggggg ngaaaaanaa 740

<210> 4548

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4548

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catggaggat ccctccgagc ccgaccggtt ggcgccgcgc gacggcggga gcccggagga  180
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<210> 4549

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4549

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aggaactgac ttctgttgag cactcaacac gccacagaga ccagccatct tgcaacctca  180
cctcacagca tggagagagg agaccaacct aagagaacca ggaatgaaaa cattttcaac  240
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ggctccactc attttgccaa atggggccaa gatactcatg atttgctgga agagacagca 360
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 attctacatt gctttttaag gactgcacta aggtncataa agaaaacaat caancaagaa 720
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 cgnaatccca aaagatgatg aattgtcaga aggacnaatt aagnccataa ccctaaggga 840
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<210> 4550

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4550

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 aagtgtgtgt gcaaaaccgt catgaangga caccctgcaa gcctgtnaaa nggaaggccc 720

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aag 783

<210> 4551

<211> 534

<212> DNA

<213> Homo sapiens

<400> 4551

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tatectcaac tacctcttct cactgtcagt gacaccatct tggaatacct ttgggaagca 180
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gtatagggag ggtgagggaa gtgggggggtg ttaggtaagg gttgggggta aaggttttgg 420
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<210> 4552

<211> 764

<212> DNA

<213> Homo sapiens

<400> 4552

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gatcccagca agctgctcgg gacaaacaga gtcccagcca ggccaatggc tgcagcgacc 480
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ctggggaagc accgagactc tanaagaaaa gcctccgggt cacaggataa gtctgctcca 660
tctggacaca aagnatctga cggtagaaga gntatttggg aactccttgc caaanggaac 720
aaaccagcaa ttnttggggt cctgggttca aaaagaaaat tggg 764

<210> 4553

<211> 636

<212> DNA

<213> Homo sapiens

<400> 4553

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aatttttanc accnaggcnc aatntgggtt cccaag 636

<210> 4554

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4554

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accagcactg tctccaccct agagtcaagt ccatcatctc cagaaccagc tagtcttcct 180
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<210> 4555

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4555

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gatcctgccc ctaagactgc tgaccttgta gctattggag cagaatatga aggcacagta 180
caatttccta aagatgaaaa acagtatcat gtccctccct atttttgtta ctacagagaa 240
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 caaaggtgcc tgggattcan gtgttgancc aacngncctg gcccggggat aacactttga 780
 aatccaaacc tgggccttct ttttaacaaa acantccaan ttttgccctt gccccea 837

<210> 4556

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4556

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 taatctggtc ccagggaatt actggtttaa ctgaacatct ccagaattat ttaagggtgc 180
 aaaatatata accttcacat tgaaagataa aatttatggg cataataaaa atttgaatca 240
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 tcatagtcta ccctagtatg gtgctttgcc acaaagtgat ttctgaagaa tggttctttt 360
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 aggttgaaac tggaactgtt tgtttctcat attagctact tctctattag gagcacaaga 480
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 tgtattatga tttattaact tgttgatgca tgtaaattgg gtgcattttg ttgcatgta 600
 tgttaaattg tgaccaatgt ttttacaag gaattgaaca aaaaaagtat cttttaanaa 660
 anaacganan n 671

<210> 4557

<211> 882

<212> DNA

<213> Homo sapiens

<400> 4557

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tcacatgtta aatgaccct gaatagaata ggaagaacaa tgttcttaca ggtcataatg 540
tatttcacaa ttaaaaaact aaaatatgta cccattttta agaaatcata cttctctcca 600
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agaataaatt gagaccatta anccaatata atacttggtc aagagcactg naatcccgga 780
agaggagaaa atttgggtaa aaattaaaaa nggttggggg gatcttaaata gcctcagtta 840
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<210> 4558

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4558

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cccacctcca acactgggga ttacaattca acatgggatt tgggtggaga cacagagcca 540
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aagatanccc atgtagactt tttctgaaga taccceaagt ggnnaagatt ttttaattagg 660
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<210> 4559

<211> 851

<212> DNA

<213> Homo sapiens

<400> 4559

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gaaagcttta ctcttgattt gaatattttt caagatgtct tacacagaga cactctagt 180
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gatttaacag cagagggcga tcttaacata ataatggctc tggctgagaa aattaaacca 420
ggcctacact cttttatctt tggaagacct ttctacacta gtgtgcaaga acgagatgtt 480
ctaatagactt tttaaatgtg taacttaata agcctattcc atcacaatca tgatcgctgg 540

taaagtagct cagtgggtgtg gggaaacgtt cccctggatc atactccaga attctgctct 600
 cagcaattgc aagttaagta agttacacta cagttctcac aagagcctgt gangggatgt 660
 cangggcatc attacattgg gtgtcccctt tcccaagatt taagcctttt gggatacaag 720
 acctangttt acaatataat aaatattaat ggctaacctt tttaaaggatn taanaantag 780
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 ttanaagggg t 851

<210> 4560

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4560

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 taagcaggcc ttcctactt atcacaagat tcattcaatg ctacatatgt acagcctaga 480
 agaaaacaga gagatganca acttctgaca aatgtcctgn aaacacttcn aggggatgga 540
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 caagatttgg aggactaaag atgcagggat tgggtggttt acncattggn acnccnaaat 660
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<210> 4561

<211> 692

<212> DNA

<213> Homo sapiens

<400> 4561

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ttgtccaata tcagctgctt ttgggaaagg aaacaaaaaa gtgaaggaaa tattttcagg 240
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ttaacatgag tagtttattt tgggtgggctc canagtgtaa gaatatttta ttttttgttt 540
gacataaaaa gtgaagttga cttgcgggaa taacaatcca gcaatgcttt caatctttct 600
gaataacaca agaataacgg ngctanaagc ttccgggatt anttgtccaa ttccagttaa 660
aggagtgngt tacatttaag gtttggaat an 692
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<210> 4562

<211> 682

<212> DNA

<213> Homo sapiens

<400> 4562

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tgcattactt atgttggtta acctcaaagt taaccttttg ctggttgatt atcgaggata 180
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cttgggtgga gcagtggcta ttcatittggc ttctgaaaat tcacatagga tttcagccat 360
tatggtggag aacacatttt taagcatacc acatatggcc agcactttat tttcantctt 420
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tccgatgcgt taccttcctt tatggngcta caaaaataaa tttttgtcct acagaaaaat 480
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 ccagtaatga tgaancaact ttatgaactc tccccatctc cggncataaga gattagccat 600
 ttttccagaa tgggactcac aatgacacat ggnaagtgcc aaggnnattt cactgcacct 660
 tgngacaagt tcatcaaagg aa 682

<210> 4563

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4563

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 gtcagtttcc acctcagcac ttgaccttat caacatgcgg tcgcatcta gtggccaaag 180
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 taaagtaaac ctttgctggg tggcccaaata tctggccnc aaggcaagat aagaaattgg 540
 gtgtaaagga ttttgttggg ggggcctggc caatgatctt tganangaat ccccgaatna 600
 nccaatagtt tttttggtc naatttttgg g 631

<210> 4564

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4564

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ccagaaattc ccaattgaga attgtgttag tgggtaaaac cggagcagga aaaagtgcaa 180
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<210> 4565

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4565

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<210> 4566

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4566

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 ataattttga agataaaaaac atcaanatata aaaagcaagt gctcccgggt gggactgtac 720
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 gcaatttnag 790

<210> 4567

<211> 531

<212> DNA

<213> Homo sapiens

<400> 4567

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tccccggtcc cccgccctgc tcacctctac tatgaagggt cccccangtc acctgtgctg    180
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cacccaacca ccccatggga tccccancc ctttaaccgn gcctgccttg tcccatgat    480
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<210> 4568

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4568

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ttcctgacgc tcctggcgca tctggtggtc gtcacacct tattctggtc ccgggacagc    180
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ccaactttcc cacacgagcc atttctatca ggactccctt caggcacctg acacaatagg    420
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tttacaaggg

490

<210> 4569

<211> 546

<212> DNA

<213> Homo sapiens

<400> 4569

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<210> 4570

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4570

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gttcaccagc cgccggggca gtagtcgaag gcccggcgcg gcatgtcctg ggtgccgcgg 180
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<210> 4571

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4571

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 aacttgaaaa tgtggctaag nccaaactgg agaagtgcen aaagtttaaa attacaaacc 780

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801

<210> 4572

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4572

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<210> 4573

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4573

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<210> 4574

<211> 422

<212> DNA

<213> Homo sapiens

<400> 4574

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caggtccatg cccttagatg tgccaaattg taagttgcat agatttttagg ggtttggggc 180
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tgagaaattg accattaatt tctgacagat agtttaagt cctcctgtga catacaaaag 360
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ca 422

<210> 4575

<211> 513

<212> DNA

<213> Homo sapiens

<400> 4575

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tgttccccct acaaggaact tcttgcagtt atccaaatgt tccctgtcct ggtgcacact  180
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gagaactcac acttctgttc agaccctcan atgtgactgc ttccgtgtta ctgctttctc  300
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cccccttccc tgggggcttt gctgatgcct ctgtcanagc actcagcaca tgacactcgg  420
attactggnt canantcccc tgcttccaaa ggctctgcct gnatgcctcc aagggttatt  480
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<210> 4576

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4576

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cccatgacaa tgcagatfff ggcaaagctg catctgctgg tgagcagcta gaactgaact   60
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gccaaccct gatgacctct ctccaacttt cggagaagct aaaacttact tatgaggaaa  180
agtgtgaaat tgaggaatcc caattgaagt ttttgagaaa taagaatcac ggccgggagc  240
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gaatcacttg aacctgggag gcggagggtg cagtaagctg agaccacgcc actgcantcc  480
aacctggcaa cagagtgaga ctccatttca aaaaagaaaa acanaanaag aaataagaat  540

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cactaactgc ncttatagaa attatgatat tcaagtaaaa taatgaaaat aaagcacttt 600
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<210> 4577

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4577

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 aattccattt gttgagtctc ttacatcacc atgtgtgtga tgtggaatga agagatgtga 240
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<210> 4578

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4578

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 acaaaggaaa ggaggaatct ncttaaactc ccccttngaa gccaanagnc cacagctaag 720
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<210> 4579

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4579

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 catctcttct tgcttctgct aatggtaacc attctttttc agtatcataa taagcttggt 480
 aaacaaattt gatgtgtttt aaaagtgccg gctaaagtan aaagacatca ttaagaacaa 540

ctatgacatc ttcccataaa acttcccttg ntaactanac tgcattggatt attgggtttg 600
gatgccggtg nan 613

<210> 4580

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4580

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gcacacaaca ggagagagga gaaagaagaa acgctagtaa ttccaagcac tggaattaag 180
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gtcatganga gaaattgaac agctgaccct acaangatga naaggttgan aagttttaan 660
ga 662

<210> 4581

<211> 808

<212> DNA

<213> Homo sapiens

<400> 4581

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<210> 4582

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4582

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 gaatttagtc atttatggat aaattaaaat gaacacctgg actcttggtta aaatcagaaa 180
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ttgtttaatt gggggacngt atangccttc cttgactgga caatnagaat gttggnatta 780
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<210> 4583

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4583

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<210> 4584

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4584

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<210> 4585

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4585

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<210> 4586

<211> 902

<212> DNA

<213> Homo sapiens

<400> 4586

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cctacttttt cgaggtata ttaggaatgc atatcctngn tggnacctac acaaangcct 840

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<210> 4587

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4587

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<210> 4588

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4588

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ctgaaaacag tgaaactgag ttagaaagga ttttgcgtcg cagaaagggtg acagcagaag 60
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tgggttctgt atccagtgtg acaaaaacag ccttgaacaa gaaaactctg gaggcagaat 180
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tacangttct tttccggtgt cacttttgta agtagcaact ataaacataa gttaactgtt 660
tagcaaaaca cacattccca ntaaggnttt gggtttttgg atcctttana aangattgag 720
ggtttttttc ccna 734

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<210> 4589

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4589

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aaaattctcc gttctatgac aaataccgag gaggtagtga aaaaaaaatt aacaaacata 60
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ttgaagaaaa gaacagtaag aaaccagaaa gtagtatttt gggggcagct cacgtggagt 180
caggctcagt gtaggacttg agtgaaagac tttccaaga agccccaggg ctaatctggg 240
cagccctgga tgcttaggtc tggaaccag ggccagaatc tttgacagcc agatccagta 300
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atttggttaga agccaattct aaacattcaa atattcnaat atgtaaaca aaaaactgga 540
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 ttcactttaa tcagtttgct ttcagaacat aaactgcatt ctaaaccctg ttattttggt 660
 cctaataatta acanccccna aagagaagtt agatgtttat atngaangcc agggaagttg 720
 gtaaagtgat attatccngt gggatttta 748

<210> 4590

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4590

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 gccaaagctgg gccttcctcg gatcaggcgt cccctgaagt cggcacgccc ctctgcgtcc 180
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 tgagaggtct ggagtggctt gccgagtcaa gtactgcaat agcctccctg atatccctt 360
 cgaccccaag ttcattacct accccttcga ccagaacagg atcgtccagt acaaagccac 420
 ttccttggag aaacagcaca aacatgacct cctgactgag ccagacctgg gggtcaccat 480
 cgatctcatc aatcctgaca cctaccgcat cgaccccaat gttcttctag atncaagctg 540
 atgagaaact tttggnanaa gagattcaag cccccacaa gctccaagag attccancaa 600
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<210> 4591

<211> 654

<212> DNA

<213> Homo sapiens

<400> 4591

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gctgggaccc tgaggcggcc gtggttaggc ggctccccgg cggctcctcc gcggcgggtga 60
cggcgaccgc actccccgt tcccgctccc cgcgctcctc cgcccgggtc cgccagccga 120
ggccgctccc gagcgtcgga agatgccggc cgtgtccaag ggggacggga tgcggggcct 180
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ngtcctcgtn gcccggagac actatggaca gcgtgaanca aaagcgcggc cntg 654

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<210> 4592

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4592

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gatatgttca tgacaaacat tttgaagttc tgcattctga cttggaacca cagatgaggt 60
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tgtatcttgc acaagacttt tttgatagat ttatgttgac acaaaaggat ataaataaaa 180
atatgcttca actcattgga attacctcat tattcattgc ttccaaactt gaggaaatct 240
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ttctacctca gtattctcag gaaacattca ttcaaatagc tcagctttta gatctgtgta 480
ttctagccat tgattcatta gagttccagt acagaatact gactgctgct gccttggtgcc 540
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aatgtgtana ttggatggta ccttttgtca atgtagtaaa aagtncatgt ccagtgaagc 660
tgaagacttt taagaagant cctatggnag acagn 695

<210> 4593

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4593

tcaaaagaaa agaatttaat aaattccctt tttccctgag ccagcttagg ggcaatgtcc 60
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tctctccaag ctgacacccc aaagagccaa agccttggca cctgggtccc tcaggaccgc 180
tcactgaggg gatggcatct gagtggctgc tctgcagtca tgaggctgcc atgggtggat 240
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cccgaattgg gacaaccagg aaggtctcca gacattgcct catgttccct gggggggaaa 600
agcgcaccct ggttctgaac catctcttca nggntaaaga tttcctgaag gaancctcan 660
tccaacaagn tcagtaa 677

<210> 4594

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4594

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gcccgcgttg cgacgtggtg cagcgcatac tttcacaagt gggctctccct tgtccggggac 120
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 gaccaatttg cagatcaagg aagagaaagt caaagcagat accaatggta ttatcaaaac 240
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 cactggtaaa acagctgcct ttgtcttagc catgctcagc cgagtggngc catcagacag 600
 atacccccaa tgtctgtgcc tctccccaaa catatgaagc tggngcntca aacaaggaaa 660
 tnttgtttga ncaagatggg gcaa 684

<210> 4595

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4595

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 ttctattatt agagtagatc gaagaaaaaa ttagtctcag aaagagcttt tagtctgatt 120
 gtttccattt cccatgtaat ttttaagttaa gctaaagttt taaagtggca gttttctgtc 180
 gatgactttt tcaagtgcta acactgtctc ttttgtgaaa atctggaaaa gtgctcatat 240
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 ggaaaggtaa cttatttctc ttctgcacag agcataatgt gaaagtttta tacctacttt 600
 taaaattctg cnttccagaa acaaaattcc tgcagtggtc taatttaattg tctttaagt 660

ttcanattac aattaaaac ctcatTTTT tttccattt ttgnacctaa cagtggtgaa 720
tactttacgt tgggnatcc 739

<210> 4596

<211> 229

<212> DNA

<213> Homo sapiens

<400> 4596

gacagggcct ctttctttgc ttctctccac agctcttccc agccgggggg ctgagtggcc 60
tcccccttct ctccctggcc ctcccccttc tccccctca ccgccagcg gggcttctaa 120
ctgacagttg tcgccgggcc ccgtccgtgc accgcctcct tctgcccgtg tccccgcag 180
gtagaggggg gcgggagggg gtgtgagggg gaggagagag nnaatgana 229

<210> 4597

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4597

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agcgcggccg gcatggcggc gacaaggagc cccacgcggg caaggagcg ggagcggctct 120
ggcgctcccg ccgcaggaag tgaccaagtt cactcctgga tgctagctac aagccaagcc 180
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gcttatgagg agctattttg gcggcatcac attaaatgtg ttcgacaagt aaggagagat 480
aactatgatg ctctcagatc agtggttattt cagatattca gccagggcat ctcttttcca 540

tcatggatga aagaaaagga cattgttaag cttcctgaaa aactgctgtt ttcacaaggt 600
 tgtaattgga ttcagcagta cagttttggn cctganaagt atacaaggct ccaatgttgt 660
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<210> 4598

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4598

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 ttctgttgaa tgttgttcat ataactatat ctgttgcat aggagatggc ctgcttgcaa 180
 ccagatttga ctgctgcata tgccaacctc gttgcctctc ttcgtccttc cttacagaaa 240
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 cttgtactat acatctccca aagaaaccca tggatgcata gctttgggca gcttttgagg 480
 aacagcaggg taatattaat gaagccagga atatcttgaa aacatttgaa gaatgtgttc 540
 taggattggc aatggttcgt ttacgaagag taagtttaga acgacggcat ggaaatctgg 600
 aagaagctga acatttgctt caggatgccca ttaagaatgc caaatcaa atgaatcct 660
 cattttatgc tgtcaaaact agcccgnat cttttcaaaa tacaagaaaa aaccttccaa 720
 aatcaangaa anggggcttt tgggaagcaa tcccaaag 758

<210> 4599

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4599

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gatgcaccac taaccaccat ggaaacaagg aaaaataaag ccagctcaca gggctctctct   120
tacttgatt gagagcctca gcctgccgac tgagaaaaag agttccagga aaaagaagga   180
atcccggctg cagcctcctg ccttccttta ttttttaaaa tagagagata agattgcgtg   240
catgtgtgca tatctatagt atatattttg tacactttgt tacacagaca cacaaatgca   300
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catgtttgca taaaaaaggc ccactgaatc agttaagac gaggaagagg aggagaaaga   540
gaaagaagag gaagatgttg ggcaacattt atttaacatg ctccacagcc cggaccctgg   600
catcatgctg ctattcctgc aaatactgaa gaagcatggg atttaaata tttacttcta   660
aataaatgaa ttactcaatc tcctatgacc atctatacat actccacctt caaaaaagta   720
catcaattat tatatcatta agggaatag tancttctcn tctccaaata tgcattgacat   780
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<210> 4600

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4600

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gtctttgact tcaggccctc cctggaattt ttcttggaag ccccatcagt ctttctctct   180
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atccgagatc taagtggcaa tctttgggag cgttccagtg gggatggaga agaactagaa   300
agacttacca aaccaagag tgatgagtca gatgaagata ctttctaact ggtaccaca   360
tagtttgag ctctcttgaa ccttattttc acattttcag tgtttgtaat atttatcttt   420

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tcactttgat aaaccagaaa tgtttctaaa tcctaataatt ctttgcatat atctagctac 480
 tccctaaatg gttccatcca aggcttagag tacccaaagg ctaagaaatt ctaaagaact 540
 gatacaggag taacaatatg aagaattcat taatatctca gtacttgata aatcagaaag 600
 ttatatgtgc agattatfff ccttgggctt caagcttcca aaaaacttgt aataatcatg 660
 ttagctatag cttgtatata cacatagaga tcaatttgcc aaatattcac aatcatgtag 720
 ntcnagttta catgncaaaa gtc 743

<210> 4601

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4601

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 caacctgaaa aggacttctg taacgataag agttatattt cagaagagac aagagtactt 180
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 aaacctatta acaagggaag gaagagagct gcagtgggggt caggagagcc ctggggggtt 720
 ggaagcaggt atgccaaagc accaaaactgc aagatttanc aaaanggagc acacagaagn 780
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<210> 4602

<211> 656

<212> DNA

<213> Homo sapiens

<400> 4602

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cagtgcatta caggggtgca tttagacatt ctttctccca gtagattgtg agctccgtga 180
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<210> 4603

<211> 810

<212> DNA

<213> Homo sapiens

<400> 4603

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tttaaaaact tactttgtat tgattttgaa tacagtga aaatctattgc aataaactat 180
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agcatttttg ttattatttc ggaagagaga gcatgctagt ttaagtttca ttttaattgg 300
tcgtgtactt ggtgcttttt tgttgttggt aacttgttca ttttagtaaaa agcaaatagc 360
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tttactttct gaaaaagaaa taattcatta tctctagtaa tacatctgta attcttcatt 420
 tagaagggtg attagggcaa aagtaaataa atcattatat atcattagta tgttgacata 480
 tattttcagt aacattgttt tatgttcctc cagcgtaaca tgtagctgaa cagtagaagg 540
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 acctctgagc ccactggcan tgtctctgag cagaagatgg ctgtgccact cacatatgct 720
 aatcctgggn aatctgcaa gcatgtcntc acaaggata gggatttggc ttaataaaac 780
 ctgatttgna aacaaaatcc tgagaatggg 810

<210> 4604

<211> 718

<212> DNA

<213> Homo sapiens

<400> 4604

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<210> 4605

<211> 733

<212> DNA

<213> Homo sapiens

<400> 4605

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ctggagccct gggagcggac ggtgttcaat tccatgctgg tttccattgt ggggatggca 180
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ccttataaag actaaaattc atgagtagaa caggaaaatc atcctgactc atgtgttgtg 420
ttctttatit ttaattttca aagaggctct tgtatagcag tttttgtcta ttttaacatt 480
gtagtcatit gtactttgat atcagtatit tcttaacctt tgtgactgtt tcaatattac 540
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aactcaaaat cattagttgg gctttactgg tcctgctatt gtatggcata atacatcctg 660
cctgggntaa atttccnact ccttggacca aaaggttttg gtaaaaggaa ccaaatnata 720
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<210> 4606

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4606

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cctacggaag aaagaaatac acccagacaa ccttggaccc aagcacctca gccgagacat 180
ggatggggag cagctagagg gagctagcag cgagaagagg gaacgtgagg ctgcggagga 240

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gggactggcc tcagtgaaaa ggcccagaag agaagccctg tccaacgata ccactgaatc 300
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 ggtttctggt ggcaatggga gcgtgttcca ggcgggcccg cagcttcagg cactggctaa 480
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<210> 4607

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4607

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<210> 4608

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4608

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gtgtttggct ctcgttttat tccttttaca tttgttgctt ctgggattta aaaaattact 180
aaattcataa gatagttagg tattaaacac ttcagaatat caatgtaaaa ttggaaaata 240
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gtcatactgt gtagaaattt cnattttctt tttccccatt anaagaggac caaacaattc 600
tttatacaaa tggagtaagc aactagtttt gtagcactac atttaatggt aatgagatac 660
ctttgttcat ttttttaa at ttgnaatan actttacctg atccacttg atggtanacc 720
aa 722

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<210> 4609

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4609

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cttcagtga attggaatat agttcattca aaacgaatca ggagaaagaa ttcaacaaac 60
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agctgcttga gagcaaagcc tgcctacagg attcctatga caacttacga gaaataatga 180
aatttgagat tgaccaactt tcaagaaacc tccaaaactt caaaaaagaa aatgaaactc 240
tgaaatctga tctgaataat ttgatggagc ttcttgaggc agaaaaagaa cgcaataaca 300

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aattatcatt acagtttgaa gaagataaag aaaacagttc taagccctgg tatacagtgg 360
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 acatttattg atatccaaca agccaggcac tgatctgggtg aattccagaa catttagagt 480
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 agtgatcagt tccctggaaa agtctaagag atctgataag aaagttgtag cctgaccctc 720
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<210> 4610

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4610

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 ttgaaaatgt cggacctcag gaacaaagtt ttgaaaaaac cattctgaaa acaattctct 180
 ggtgaaccaa acatctttac tgggtttata tatcacaggc aatgtacttg tgtcctcttt 240
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 tgcatttgca cataaaaagg cagacaacct ttctttgttt attttcttcc ctggtaggca 360
 gatattcttc ctacttgcct gagaattttc tggcattgac ttccaaaaga ggtctgtttc 420
 atccccactg tatagctgag ctagacacag tttctcctct ttgattatca tggacagttt 480
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 aacggnacaa cgggggtgaag cgtttctgtt gggaccacat gtttnaccgc aat 713

<210> 4611

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4611

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ctaaaatgga ctggtcttgg gtgtgtaacc ccggtgaagt tatagcctcc ccaaattgag  180
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ggccagcctc tgtgccaccc agtacgacag aggagtggga actggccctc tggggctctg  300
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gagctcaccc catgccatag ggtgtgggaa gagggcacag gaggcctcat ccatggggga  480
aagggttgag gatggacatg ggtggggaga gggcatagac atcccttcct aatctctgtt  540
cccaccacat ttcatangag atgagttagg anatgacagc taactctctt aaggacattt  600
tgaccccagt ttatgttggg gatggccata aaggaaaatg tctanagata ggaaggtaaa  660
tcaantctgc caaccctac catcaggtct ggggccaccc caaactttgg gctgcctccc  720
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<210> 4612

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4612

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ggtttctctg tttgaagggc tttaaactta taacaaagaa aataaaaatg acgacttcgt  180

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 tcaagacagg ctccgaacgt gtggcccagc agtgccggga gaacatcttc gccatccaga 480
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 agaagtcaaa gcaactggtg gctctcctca aggacgagga acggttgaag gctgagaggg 600
 cccaagctct caaaacaaa gagcgcatgg gccaaagttc cactgggcat gggcagcaac 660
 cagatnacct ttgggcgaag ntccaancaa gcccaaactc tccaac 706

<210> 4613

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4613

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 atatattggt tcttgctaac ttgatctata atttcaatgc aatcccaatg gtataagttg 180
 gatgtttgtc tcctttaaat ctcatgctaa aatactattc ccagtgttgg aggtggggcc 240
 tgggaggtga ttggattgtg ggggcggatg tctcaagaat gttttatcac tttcccattg 300
 gtgagaattg aattcttgct caagatctgg ttgcttaaaa atctaggccc tccccactg 360
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 tttctgcata ttgccaaact gattctaaaa tttatatgga gaggcaagag acaggatagc 660
 caacacaata ttgaaggag ggagaacata gttggaanac tgacattacc caacttcaag 720
 nactaattat taaagctaca ctaaatacaag acagntatgg tattggtgaa a 771

<210> 4614

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4614

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ggccgggcta ggcccgtacg gcgcggggaa ggcagtctgg aaaaggcgcc cgcggcagcg 180
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gcttgccgtc agctgcggca tcttccgcac cgagtccggg gcttgccgcc ggctccttct 480
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nctgtcacc 549
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<210> 4615

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4615

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gatcccagga agggcacacc ctttcctcac caccgagtg agcgctgccc cctcacagag 180
acctctttgc cccctgggcc aggcagagca ggcgctgcgg tccgggaggc cccatggagg 240
tggcggtgcc cgtgaagcag gaggccgagg gcctggcgct ggactccccg tggcaccgct 300
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tccgccgctt ccacctgggc gacgcgccgg gcccgcgga ggcgctgggg ctgctccgcg 360
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 ccacaggtgg aaaggaggac aattgggatg attcccttaa ggaacgcccc ttggggctga 660
 aggggnccgg cgcctggggg aatcccaagg ctgtgcgccc ctacaagcaa ggagncccaa 720
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<210> 4616

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4616

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 cacagagcag gattaagcta tgaagccagt catgttgtat caccagaaca aatagccaca 240
 agtgacaaaa tgcagcattt caaaagaact ggcacaggaa cacctgttaa acgagttaga 300
 aaagctatag agaagtctga aaccacttct gaacacactt gtcagctctg tgggtggttg 360
 tttgatacta aaattggatt atcaaatacat gtttagaggcc acttgaaaag acttgaaaag 420
 acgaaatggg atgctcacia atctccaatc tgtgttctga atgagatgat gcaaaatgaa 480
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 agcataccgt aatgggctaa agactgaagc tctgtcagtg tccgcatcag aaagaaagaa 660
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<210> 4617

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4617

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tcaaaatgtt ggtggtgcaa ggagctcaaa ttccatgggn ggncaacca aagatttncc 780
aaattatt 788
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<210> 4618

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4618

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catgctggca aggagctggg gttatgaagg gaaagagcag ggcacaaggc aagtagggct 120
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cgtgactttt cccctttcat tatgtgtgtc caccgagctg tcctgcttct gttttgtaat 180
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 cttctccctg tatttctctt ccatttaaaa gtctcttaaa actccaaggt gtttttaatt 660
 ttaanccctt gtaaaaacaa tgaaaataag taanaagttt gtgggtgggtg gtggtttgaa 720
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<210> 4619

<211> 615

<212> DNA

<213> Homo sapiens

<400> 4619

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 ggaggagctg canaagcaga agtcggagct ggagcgcgan gtggacaagc tggcgcgca 540
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<210> 4620

<211> 559

<212> DNA

<213> Homo sapiens

<400> 4620

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<210> 4621

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4621

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 gcgttccatt ccgcttgacg gaaaaaacgg ttttctctt tgctgatgtc agtcgcattg 480
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 ggnctaagct atttaccant cctgcttgga cagggccttg ggggtgcttga anaattcaaa 720
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<210> 4622

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4622

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<210> 4623

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4623

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attcagagca tagtgactat agtcgaaaac tgagattgca cttccaaaat tgggcacaag  540
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<210> 4624

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4624

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aactggaaaa ggactaccag cctgggatca cttatattgt ggtgcagaaa cgccatcaca  180
cccgcctttt ctgtgctgac aagaatgagc gaattgggaa gagtggtaac atcccagctg  240
ggaccacagt ggacaccaac atcaccacc cttttagatt tgacttctat ctgtgcagcc  300
acgcaggcat ccagggcacc agccgaccat cccattacta tgttctttgg gatgacaacc  360

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gtttcacagc agatgagctc cagatcctga cgtaccagct gtgccacact tacgtacggg 420
gcacacgctc tgtctctatc ccagcacctg cctactatgc ccgcctgggtg gctttccggg 480
cacgatacca cctgggtggac aaggagcatg acagtggaga ggggagccac atatcggggc 540
aagagcaatg ggcgggaccc ccaggccctg gccaaagccg tgcaagttca ccaaggatac 600
tctgcgcacc aatgtncctc gcttgaangn aaaacgctgt tt 642

<210> 4625

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4625

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tatgatccac agaagacctg atttatgaaa tttgtacta aaatcatttg gaaatgattg 180
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ttttgtanga actgtggctt ttccattgt gaagcattga ntatcacaat tttgggacat 780
gttaataggg gggagtcccc nggatcttt 809

<210> 4626

<211> 607

<212> DNA

<213> Homo sapiens

<400> 4626

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atattaactt gagtttcctt gagagctctg tttctctgag gttcacactg acttcaaagg   60
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ggctgttcac cctaattatt tctaactaat aggggccttt accctatatt ttctataggg  180
ttcgtgaagc atagtattct ggcaacctta aatccatcca agaagaaata agcaatgtgt  240
taatttggtg tttttgcata gtgtagagat agattaatga agagcagctg ttgttatagc  300
cctgccacct tatttttaat gtaaacactt gatccttttc agagcacttt cacatttgat  360
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aaactgactc agggtcaggt ggctcattca gcttgccctat ggttacaaca agcaaggtat  480
tcggccttac aggtatttga cacctgtgtt gttggnccat ccacagctct attancagca  540
gnaggatcctt atttggaggt tgaagtaggg aatggaagat cttatttgtg tcgaaagagc  600
cctttta                                         607
    
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<210> 4627

<211> 829

<212> DNA

<213> Homo sapiens

<400> 4627

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tcgatgcaga actccgtctc cttagacatc agaaactaaa actagatact cagatgaaat   60
tatctgacct gcacatgtc acctattttc aagaaatact tctcctgaag aattttgaaa  120
aacaggagaa catacttcaa gaacgtgtta attccttaga caaagaggaa cagtacatgc  180
aatggaaaat aatgaaact cttaaagaga tggaagagaa aaagaatgaa atcaccaaac  240
tccaggagca agaaaaggca ctctatgctg gttttcaagc agccattgga gaaaacaata  300
aatttgcaaa cttcctcatg aaggctcctaa agaagaggat taaacgggta aagaaaaaag  360
aagttgaagg agatgctgat gaagatgagg agagtgagga atcaagtgaa gaagaatcta  420
    
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gcttggagag tgatgaagat gagtctgaat cagaagatga ggTTTTtgat gattctatTT 480
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 ncctggaggc ttatcagcga gagaagcagc agcggctgaa tgaactgcta nttgtgattc 720
 cgctcaagct ccaccaagat agagtatgtg ggaatttggn gaaataccta gcgatctttc 780
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<210> 4628

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4628

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 attgtcagaa acacagctgg acgtgagtta aagtgggtgaa aaaacagatt ttattcagta 180
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 ttttaaagaa agaattgagg agacgggaat aaaggagctc cgaagtgtcg gggaagtgaa 300
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 ccagagagga cgtggaacct tcccgtccc accgcgcact tgccctgtgt atctcttccc 420
 ttTgctgtt catctacata cgtggtagtT tcctttatag taaactaata aacggaaatt 480
 tgcagcagct gtgaaaaact tcaattttct gaatccactt ttgattttta gtggcgattg 540
 cttaaattgcc tcagttttaa gtatcataac gaaaggaaag catacgattc ctatattaat 600
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 atccaaggct ggagtgcatt ggtgggaaca cagctcgctg cctactcagc ctctgggct 720
 caagcgattc tccgcctcag cctcctcaag tggctaggac cacaaggcaa ccacgacta 780
 aaacggccta aactaaaggT ttttggttta aaataanatt aattttaatt ttanaana 838

<210> 4629

<211> 782

<212> DNA

<213> Homo sapiens

<400> 4629

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gtgcggaagg tggggggcgg cggcactgcc ggcggggacc gctgggaagg cgaggacgag 180
gacgaggacg tcaaggataa ctgggatgac gatgatgatg aaaaaaagag gaagcagaag 240
taaaaccaga ggtaaaaatt tcagaaaaga aaaaaatagc agagaagata aaagagaaag 300
aacggcaaca gaagaaaagg caagaagaaa ttaaaaagag gttagaagaa cccgaagaac 360
ctaaagtgct aacaccagaa gaacaattag cagataaact gcggctaaag aaattacagg 420
aagagtcaga cctcgaatta gcaaaggaaa cttttggtgt taataatgca gtttatggaa 480
tagatgctat gaacccatct tcaagagatg actttacaga gtttggaaag ttactaaaag 540
ataaaattac acaatatgaa aagtcactat attatgccag ttttttgaa gtcttagttc 600
gagatgtgtg tatttcattg gaaattgatg acttgaaaaa aattaccaat tcactgactg 660
tgctttgcag tgaaaaacag aagcaagaaa agcaaagcaa agccaaaaag aagaagaaan 720
gtgtggntcc tggaaggggg attaaaagcc accatgaaaa gatgatctgg caanattatg 780
gg 782

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<210> 4630

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4630

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catgggaatt tgtttggttt tttttttat gcttgttttt gtttttaaaa taatacataa 60
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accataaagt ccagtgaaaa tacaagaata caatgctgca ttacagaact ccaaatctga 180
aagtacctcc ctttatcatt cagttctcag atcaaaggtc atttctttaa aggtaatttt 240
ctgagttccc tagctaaaat atcacatcac taaccaattc agttcactct attttctgta 300
ttatcttttt catatcattt tatttctaca tgaaatcatc tgatttattt ttaaaatttt 360
tattgtctat cttatttcac ttaaaagaga ggagcaagaa ccatatctgt cctgtttatt 420
agtgaacac ctaaaagaat acctggaaca tattaggcaa tcagtgaatt tttattgatt 480
gaaaccatag aatcaaaata gcttgatttc tagctttgtt gtttcatagt ctaactttag 540
acaaattatg ttctctgagc ttcattatct gctctgtaaa atatcttaag gcttgattga 600
agattaaata agctaataaa tgaaaataac tgacacaata ccggacanac aaggagcatt 660
caataaaata tgtattttta gatgggatac cgcaattaat caagggaagt ctgtttacaa 720
agaaagnaaa tcaacggggg aaaccgggtg tccaaggcct ataatcccaa gcantttggg 780
gagggcanag g 791

<210> 4631

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4631

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gccgcatggg ggtgtcaata ttgatcccc ctgtgaattg gcttcctcct ggttatgtag 120
taaatcaaga caaaagcaac acagataaat gggaaaaaga tgaaatgaca aaagactgca 180
tgctggcgaa tggcaaactg gatgaggatt acgaggagga ggatgaggag gaggagagcc 240
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aggaacacat cagatttata gataatatgt taatggggtc aggagctttt gtaaagaaaa 360
tctctctttc tcctttttca accactgatt ctgcatatga atggaaaatg cccaaaaaat 420
cctccttagg tagtatgcca ttttcatcaa gattttgagg attttgacta cagctcttgg 480
gatgcaatgt gctatctgga tcctagcaaa gctgttgaag aagatgactt tgtgggtggg 540
ttctggaatc catcaagaag aaaactgtgg tgttgacacg ggaaagcagt ccatttctta 600

cgacttgcac actgagcagt gtattgctga caaaagcata acggactgtg tggaaacct 660
gctgggctgc tatttaacca nctgttggga aaangggctg ctcanctttt ccc 713

<210> 4632

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4632

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tgaatttatt aggttctgtt agattcagtt aaattggaag gttaggaaaa gtaacataca 120
gtgggtgaac actgtgtatg tgaaaacact attatcttat gtagtcacaa gttagtcaat 180
gtcaacacac acatttcaca ttccattctt gtatgtacgt acttaaatac ctgaggtaag 240
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agattttgtt gctgttggtg gccttatagg taaatccttt caattcttcc tacaatgaat 360
ggcttgtacc ttatgtagaa aaattgtgaa agagaaatag aatatacctc tgaagtttta 420
tgtatcttgg agtaactttg tttcacagtt aactcttggt tgaaagtatg agtggttaaaa 480
atggggaaaa aattccacaa aatccttgga ttgagagcca gaaaaatgct tccatttaaa 540
aatgttggtt gacagacaaa aaaaaaata ggtttttccc catgtccaag tttaacacca 600
tgtttctatc ccccttcccc agacaactgg gcagatgtgt tancatatan agtcngtttt 660
gggttgc 667

<210> 4633

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4633

agtcagtcta ttttgataaa atcaactgaa aaaacatttg cataaagact caatgtaggg 60

gaaagattct tgacacaaat cttacattaa aagtctgtta atatTTTTat taacttttac 120
aagatcctgt tgtttttcat ttactataag tcctaagtca aatatgcctc acaccaagca 180
tctgaaaagt taagtacagt ttagtgtcac atttgcttga gcacatttga gtttcagact 240
catttaccat tgtggaatct gcttttggat attagagatg tttgttcaaa taccagaaga 300
cagaataata ctatcttcta ggctaaaact aattaattac tttcatataa tggacaggag 360
aaattcacat cagatagata ttttaccagt taatgggtga gcagaatatac aaactatTTT 420
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ttatttatag ttttatatgt ataatcctag tttatcctga gatgtatttg cttttgcttt 540
ttaaacttat aatttaaaaa naaagagaga gagtcagaag gttgttttaga tggggaccat 600
aacaaacttc tgtttcccta aactcaaatt gttacnag gcc 643

<210> 4634

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4634

aaacgcggaa ccatggccgc tgtggttgct gtttgcggtg gtctagggag gaagaagttg 60
acacacttgg taacggctgc tgtcagcctt acacatcccg ggactcacac ggtgctttgg 120
agaagagggtt gttcacaaca ggtatccagc aatgaggacc tggtagaagt tttttttct 180
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gactttctga aagcacaggt tcctgctaca tgcaaaggna ttttgacact aattagacca 660
tacaagcac ttggcacana nctgaagagt agttacctga gcctgaatgt aaattgg 717

<210> 4635

<211> 832

<212> DNA

<213> Homo sapiens

<400> 4635

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aagggcgatg acgatgtttt tgtgaacacc atcacatcct ggaattactt tgaatagttt 720
tatccaagac caaagccaaa agattttctt aaangttgat gtgatccaca atgctgggac 780
ctcatcgga taagaagctg aagttactac atcccaaaa gttgtttacn cc 832

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<210> 4636

<211> 784

<212> DNA

<213> Homo sapiens

<400> 4636

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tagactgtct ctttctgaaa tattaagcaa tatcangatc atgtcgacta cagtgtttcc 60

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agccaaggct actaaattta caggacagtg atagtgaaga atgtacctca agaaaaccag 120
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<210> 4637

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4637

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atattacaag aatacgaaga agtctatgga aacacatata atgcataacct tcaaagagga 600
cttctatggg gaaatcctca ntgtggccat ttgttgggct acctgagacc aagaaaagan 660
nttgg 665

<210> 4638

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4638

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cactcacgtt agggtccag gggcctgcaa tacagcggtc gagagacaaa tatnaccag 660
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<210> 4639

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4639

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 ggggtcccatc ttagattctt ttgcgccctt cccggctgct gcctggggcc ctttcctgct 180
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 ann 543

<210> 4640

<211> 847

<212> DNA

<213> Homo sapiens

<400> 4640

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 aaaaagttaa ttaatgttaa atttatgatg cagaatgata gcatcagatg tctgcagctg 180
 aaaaaaattt actactatga acccccacaa tatttcagttg caagaaaatt tgattctaaa 240
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gtttcagaat taaaaataag cattatttca tatgggcca tcagattcgt tacataggcn 780
atataaat tttgtcccantt tcaccaataa gcacaaanta attggggcaa aactgccttt 840
gagggcc 847

<210> 4641

<211> 855

<212> DNA

<213> Homo sapiens

<400> 4641

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gtacagtgga ccaacatctc cagttccaaa aaccctcaca ccaggtgcac ttctccaaaa 180
cagaccattt accaaaagct catgtgcagt cactgtgtgg cactagattt cattttcaac 240
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aaangaacag actacacatc ctgaactttt tgcagggaac aaggacccaa anactttgca 780
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<210> 4642

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4642

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<210> 4643

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4643

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 agtactacac atttttaaatt tgtagcttc ctttaagtata tcatgttaaag aaatgtctta 600
 atttttgaaa aaagtacata tttattttcn tttgaattgt ttttantgtt ttctatttat 660
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<210> 4644

<211> 618

<212> DNA

<213> Homo sapiens

<400> 4644

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 tgaagttaga ttccaacca ttcaaaatgt tggcagctga tcacatttac ttctgataaa 180
 agtaatgtgt aagtaagggt aatcttcttt cataatgcct tatgacaagc aggtgctgct 240
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 ttcaaaagtc tcaaaacagt tgtagattaa aactgttagt tacctttcac atttccaaac 480
 tatgtgcata aaatagaata aatgcagtat agaactatgc taaccaaaat taatangtta 540
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 acatgngttc attaagat 618

<210> 4645

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4645

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aacttgagat cttttggcct atgataatac cattaatttt tgcattgctt cagtttgcca	180
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atattacaga tggaaagaat gaggtcagg gaagttaaag acttggccaa gatctgctca	300
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accatctatg ttgatttgct tttgtctatt tcctcattaa ttgaatatac tttaaata	420
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gatatttata tattgccata caaaaactta acatttaaaa ctgataatat ctgtaatgac	540
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tttcataagg taatgacaga tgccttaatg tgaagcttat ttataatagc aataaaccta	660
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<210> 4646

<211> 610

<212> DNA

<213> Homo sapiens

<400> 4646

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gggtccaacc actctccagc agggagacct ggggggtgaag gggtgagccc tgcgcaggtc	180
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cacccctcac ttctccaggg aactgccaaa gccaaaccca gctcgggatg ggattatgtg 540
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<210> 4647

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4647

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 aagagagtac acaaacaat ggaaaaacat tccatgctca tggataggaa aaatcaatat 180
 catgaaaatg gccatactgc ccaaagtat ttatagattc aatgctatcc ccatcaagcc 240
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 aagagtccaa atagccaaga caatcctaag caaaaggaac aaaactggag gcatcatgct 360
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 aaacagatat atagaccaat ggaacagaac agatgcatca gaaataatgc tgcacatcca 480
 caaccatctg atctttgata aatctgacaa aaacaagaaa tggggaaagg attccctatt 540
 taataaatgg tggtgggaaa actggctagc catatgcaga aaactgaaac tggaccctt 600
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<210> 4648

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4648

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 tggaagagtt cacctcccag tactccaggg atcagaagga gccccctca caccagtatt 420
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 aggtcttaga tgcaagctgc ttgttggatg tcttaagaat gtacagatgg caaatctcaa 540
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<210> 4649

<211> 877

<212> DNA

<213> Homo sapiens

<400> 4649

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 catcagtgtt tctgtgagca ttcttaaagc ttctttttag ccacaagaaa taactgaaag 180
 ctgatgtttt taactataag cattttttgt tgtttttaac taaaaataga agttagataa 240
 ctgttctctg aacatctggg gacagcagag ttcttaattg tcttgagtac ttaagaatat 300
 atcttgaatt gtttcacaaa attgactagg acataatgct aaaaattcag actgttttag 360
 aatcttgtgt tcatatgagt taaagaaaaa ttcaaatagt aactgtcttt gaatacataa 420
 gggaaatttt acaataaaaa ttttcaaaat tattattcaa gatttatact tagatatatt 480
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acaacagtga agagcttta tttttaagt tttggggaaa tagcttgtga gaggggaagaa 720
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<210> 4650

<211> 687

<212> DNA

<213> Homo sapiens

<400> 4650

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 taatagaaac accttgacca caagcccttg attgaacatt ttataatatt tcatctactt 180
 attaaaacaa ataatttccc ttgggttgga ggggaagtga tttcataaat taattagaaa 240
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 ctcttccctg ctctcaaaat ancctccggc tttgacaatt tgggncaaga ttcttggtca 660
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<210> 4651

<211> 606

<212> DNA

<213> Homo sapiens

<400> 4651

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cccgagagga gccgcagcct ctgggtggagt tcggtcgggt gtgggggtag tcaaggaaag 360
aagcaaaggg aatacctcct ctgaaaaatg gcagaagcag ttttccatgc ccaaagagg 420
aaaagaagag tgtatgagac ttacgagtct ccattgccaa tcccttttgg tcaggaccat 480
ggtcctctga aagaattcaa gatattccgt gctgaaatga ntaacaacaa tgtgattgtg 540
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<210> 4652

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4652

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ttttccacag agccaggggc aggaccctgg acgcgtttcc cgcagaaaag gaaagcgaat 180
ggaaaggccc attctacttc atcctgggcg cagaccaca gtttgggctg atcaaggcct 240
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acattggcaa cccccccacg ggcgagaccg tcgaggagtt ctgccggact tggggagatg 540
actacttcag cttctgggtc cgggggcgtc ctgttcttgg tcctcaactc ccagttctac 600

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<210> 4653

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4653

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gaaaattgtg atatcaatag cattgtaact cagaatgggtg aagtatgctg gaaaacaatc 180
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<210> 4654

<211> 581

<212> DNA

<213> Homo sapiens

<400> 4654

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 ttgcccattt atttctatga aagtagacta aatactccac ttatttcata gcacattcaa 180
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<210> 4655

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4655

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<210> 4656

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4656

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nggaaaaa 667

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<210> 4657

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4657

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ttgtgaatta aaatggggag aaaatgatgt gttagctatt acccagtcac gtgtcttttt 240
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<210> 4658

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4658

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 ct 662

<210> 4659

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4659

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<210> 4660

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4660

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ttacatgttt gtgtttttct atagcagagc attatathtt gcattatatg tttcaacct  180
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ttttggttgt caaatccta atgcaaccat ttagtctaaa cttagtcatt tatttgtgac  300
aataagatgt gttcaggggc tccctgtttt taagagactc ttttaaaaaa aaaaaaacct  360

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aatgttttta tcttgagtca atatgattag gtattttgga tttactttta atcttaaaat 420
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 ggtcagctta tctttaatat atggactatt cctataaacc aaagtctctg acaagtgcac 540
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 gtttaactgct cataatttta atcagctaca gttatgaaaa aggaagaatt ttgctccaaa 660
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 ggccggtaag nn 732

<210> 4661

<211> 735

<212> DNA

<213> Homo sapiens

<400> 4661

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 cctctgtatg tctcatggag gaattttaat tctgaaaaga aacatctctc ctgtcagang 660
 gaacaacaag aaacaagcac tttagtagaa accatcaggc aggagtattc aagcacaata 720
 atgtccntta aaana 735

<210> 4662

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4662

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aatgggcatg aagaaccatg aaattgttcc cggcagtttg attgcttcta tagccagcct   180
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tcacagacta ggaagaacct cgtttcgaaa ttgaaaaaac aaacgcgatt atcataaaca   480
taggcacaat gtgtcttggc tttatttata tcgtctctct gccatgaagg aatttgccta   540
tatgaaggca ttgtatgaga ggaaatttcc agttccaaag ccaattggtt acaatcgtca   600
tgcagtggtc atgggactca taaatggtta tccactatgt cagatacacc aagtgaaga   660
ttctgcatca gtatatgatg aagcctatgg aactaaattg gcaaaccctg ccaaatcatg   720
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<210> 4663

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4663

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acagatgagt aacgtgaatt tgtccgtctc cgacttctgg agagtgatga tgcgggtgtg   60
ctggttgggt agacaggaca gccggcacca gcgaatcaga ctccacatt tggaagcagt   120
tgtgattggg cgtggcccag agaccaagat cactgataag aaatgttctc gacagcaagt   180
tgaaagcaga gtgtaacaag ggatatgtca aggtaaagca ggtaggagtc aatcccacca   240

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gcattgactc agtcgtaatt gggaaggacc aagaggtgaa gctgcagcct ggccaggttc 300
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 gctctgtgcc cctaaagaag ggaaaagatg cacctatcaa aaaggaatcc ctgggccact 540
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 aagtgggtgt gataaaggat aaatacccaa agggccgtta ccattggctg gtcctaccgt 660
 ggacctccat ttccagtccg aaggctgtgg gcaaggaaca ccntngaact ccttaagcat 720
 atgcacactg ttgggggggg gnaaaaaaaaa aaaaaaa 757

<210> 4664

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4664

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 agctaccttg ccgttgctc cgccgtgccc tccatgctgt gcctgggtggc caacttctg 180
 cttgtcaaca gggttgcagt ccacatccgt gtcctggcct cactgacggg catcctggcc 240
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 gatgtgagga acagcgccct ggccttcttc ctgacggcca ccattcttct cgtgctctgc 540
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 cttgcggggc atgtgttttc tggatgaagan gagcttcccc aggactccct cagtccccct 660
 tcggtggggc tcccaaaatt caattgattc canaaaaccc cctctccggc cccatccttg 720
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<210> 4665

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4665

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cgacctcacc ttcgatgcgg aagcgcaggg gcaggtgcgc cgcctcggc ccgcgcaggc 180
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gcagccgcaa gtggcttact aaaggagcca ctttctacgt ttgtctggaa tttacgtgaa 360
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tcccagctac tcggcaggcc caagctggcc tgagccagac cgctctggac tgttttaatt 600
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ataaatttta tgtacaattg agattatcct gtatttgctt ttccccctc acttttatat 720
ggtgactttt ctcaagttag gctgaatact nacaatttgg naaactgtcg ggcctgaaaa 780
acgaancgg 789

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<210> 4666

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4666

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ctagaataac cactttagna gaagaacata aatgatctga tggagctgaa aaacacagca 60

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cgagacctic gtgaagcata cagaagtatc aatagctgaa tcgatcaagc agaagaaagg 120
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 aagaatgaaa aggaacgaac aaagcctcca agaaatatgg gactatgtga aaagaccaa 240
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 tcatcagatt caccaaggat gaaatgaaga aaaaaatgtt aagggcagcc agagagaaag 480
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 gagacaagca aatgctgagc gattttgtca acaacaggcc tggcntacaa gagctccaga 720
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<210> 4667

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4667

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 ccggcacggg ggcagcgtgc agccctgccc tgtcaggctg tcagacaagc cccggggggc 180
 agcaggtggg ctgaggacgg gctgggggag ggacggccat ggcaattggg ggctccaggg 240
 tgactcccat gaggcctccc ttcaaccagg ctttttgccc ccacaaatac tttagcaaaa 300
 tcattaaaaa tataacagtt aatggtttgg ggggtgtttag gctgtaactg ctaactccta 360
 ggaaacagcc ttttccttgg acacagatgg tccatacgt gagccacgtg aaactgctga 420
 tgttttgttt agatgcacac acatggcagc gtttcataca ggtcagcagg ttagaccggc 480
 ttttgaccat attcatcgt attttaaacc tgtggcaaaa tgaacgctta ttttacagac 540
 tttctaattt gaccagattt cttaatgaat agacacagaa ttaactaaaa acagtctcac 600

cccatgtagt gcgccgtgtc ctgagagaag tgccctccct acnangaggg aagaacangc 660
cctggggtgc aaagg 675

<210> 4668

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4668

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<210> 4669

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4669

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atacactatg taaatatagt tcattaaatc attccttggg gtttgaagac tttctaattc 180
 attacttcat tccagacatc aatgacaaca gcacataccg agcaggtaca catatgagct 240
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 attggattga angatgcaaa ggattgttcc tgggtgtata tgtgagagtg tggccaaagg 660
 agattaacat tttagtcagt ggactgggaa aagnacaccc aacctcaatc cgggggtgggc 720
 atcatccaaa caagcttgcc aanagcaagc tnaaattaaa gcaaggcaa 769

<210> 4670

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4670

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 ctttgcctaa aacacttcag acaacacaac tatacagaag cttttgagtc actgcaaaag 600
 aaaaccaaga ttgactggg acatcccatg ttaacaagat attcaagaca aagctggtgt 660

ttgaangggg attttganc cntgcgaa

688

<210> 4671

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4671

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atattttgca aaagcattgt acatattatt actaaccctg gtaaagagta anttgctgtt 720
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<210> 4672

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4672

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 ganacccatc actgggcatg attaccagta tnggataatt gcccaagcct gtgatcccga 660
 aaactcttat tggnttggca c 681

<210> 4673

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4673

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tatggatttt gcttatgtat gacaactcca aggaatcttg gnanagtaaa ttgctaaac 720
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<210> 4674

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4674

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cagagg 726

<210> 4675

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4675

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<210> 4676

<211> 547

<212> DNA

<213> Homo sapiens

<400> 4676

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 gccgcgtgga gaacgcagga gggctccccga gtcctgagcc tgcgggcccgg cgcgcgcgcc 180
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acactga 547

<210> 4677

<211> 688

<212> DNA

<213> Homo sapiens

<400> 4677

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aggcagagca ccttggtgcc cagtgggcaa ctaactgcac ccgccctctg tctgccagtt 600
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<210> 4678

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4678

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 ggatgcttcc gatgccaaag ccagggancc ggggaagggc atgcctctgc ccacgtcctc 660
 gaagggatgc ctcaaaaggg cccggnttcc aaccgcaaga ggccgggagc tgcccaangg 720
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<210> 4679

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4679

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 tggggaatgg gtggaagagg cagaggtcag gcagagtgtt caataaagag gatcagacag 180
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 gcctagggaa gagccccaa gagccaggct ggggtgtcagg tggggccctt gtcctgaagg 540
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gccacttctc tcttatggct ccctgtaaca atganatacg gacacctgna ggcacctggg 660
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tgactta 727

<210> 4680

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4680

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acaacaatat atatagagtg atcgtctctg cttgctgagc taacaggggt gtcaagcttc 180
catitttgga tctacttcta aatacactca gaacaggaga aatttggact aattttcaaa 240
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catgtctgtt tttaacctaa gcaacgcat tatgggcagt gggattttgg gactcgcctt 540
tgccctggca aacactggaa tcctactttt tctgggacct ttgacntcag tgacattgct 600
gtctatatat tcaataaacc tcctattgat ctgttcaaaa gaaacangct gcatggggta 660
tgaaaaagct ggggggaaca agtcttttgg caacacaagg gaaannttcg taatcctttg 720
g 721

<210> 4681

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4681

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gtgaacaagg cgaaagtga agaaagtga caaaaagctg cagagttttc aaagaagttc	180
gatgaagaat tcacagctcg acaggaagct caagcagagc ttcaaaaaag agatgagaaa	240
atcaaagaac ttgaagcaga aatccagcaa cticgaaccc aggcacaagt actctcaagt	300
tcactaggaa ttccaggtcc tcctgcagca cctccattgc caggtgtagg gccgcctcca	360
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ccaccaccac cccttggagg agttcctcct cccccaggaa tctacttaa tctaccttat	540
ggaatgaagc anaaaaaaat gtataaacct gaagtgtcca tgaagagaat caattgnca	600
aaagattgaa nccacagaat tatctgagaa ctgtttctgg gtaagagtca aaggaagaca	660
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<210> 4682

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4682

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tgccccattt aggcctggct caccggagta agaaactaca acccccgaag tgccttgccg	180
ctcaaggtta cggaggcagt gaccaccac cctggagcca tgggtccacgc ctctctcatt	240
cacaccttga gggccccgaa tactgaggac acgggccttt gccgagtgtc gtactcctgc	300
gtcttcggtg ctgagaagtc acctgatgac ccacggccgc atggtgccga gagggacagg	360
cttctccgga aggaacagat tttagctgtg gccaggcagg tagagtcaat gtgtcggctg	420
cagcagcagg catctggccg gcccccatg gacctgcagc cgcaatcctc agatgagcaa	480
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gagccacgga cgggtggtgtg gctgggcgtg ctctcgttan gctttgccct ggtgctggat 600
 gccatgagaa cctgctactg gctgagggca cgctccggct gctgacacnc ctcctccttg 660
 acaactccgg ctgctggcgc ccagcaacaa ccttctgctg cgggctgacc gcattgangg 720
 gnacctcaa ccgcttcctg ca 742

<210> 4683

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4683

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 cagtttaatt cacttaatgt gatttccttt ccttattgat aagcagactc cattgtagcc 180
 agctgatatt tttgcatcag agatactctt gttccacca gagggggccac tgaagattta 240
 gaaaagtact catgatttga gatcaagtgt atctttgcct taaaaacaga atcacagata 300
 ctgtgggcat cagctattcc tatttttgtc tgttctcctt ttagtggaag aaggaattga 360
 aaataatgct tgcagttcag aatttttgatt taccatacta gattagctag aatcttattt 420
 aataatttaa cttccttctc ctgtcatggt gctttgttat ataaaacact acttacttga 480
 ggcaatagtc tcccaggag acaaatagaa atatagcttg ttgaatatct ttgatttctt 540
 tcctaccgtc atagtttgcc aagatttctc agcagctgag gcagcggcac tgttggtgcgg 600
 taaggtgttc tgatgtata agcagacacg tttgcaacat ccatctggag gagccctggg 660
 ggcaaggatg tgggttgacc acccaggcaa nggatgccct gaatganang gccaacaagc 720
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<210> 4684

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4684

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atntagatac ttcgagctca ataggccctt tccagaggaa gctattttgc atgatatttc 180
aagcaatgtg acttttctta ttttccaaat acactcacag tatcagaata caactgtttc 240
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catccttaga ccagagcaga gtacatgcac ttggtacttg gggacttcag gcatacagcc 360
tgtccagaat atggctatcc tactctccta ctcagaaaga gatcctgtcc ctggaggctg 420
taatttgag ttcgatttag atattgatcc caacatttac ttggagtata atttctttga 480
aacgactatc aagtttgccc cagcaaacct aggctatgcg agaggcgtag atccccacc 540
atgtgacgct gggacagacc aggactccag gtggagggtg caatacgatg tctatcagta 600
ttttctgcct gagaatgact cactgaggag atgttgccgg aagcatctgc anaaggatgg 660
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<210> 4685

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4685

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ctcattataa agctgtactg gatgtcttag tctgggctgc tgtaacaaaa tactataaag 120
tgggtgggtg attgataaac aatagaaact tatttctcac cattctggag actagaagtt 180
tgagatcagg gtgcccgcag gtcaggctct ggtgaggatc tgcttctggg ttgcagaatg 240
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ccccaccttg tgatcccatc accttgaggg taggattcga acatatggat ttggagggga 420
ggagacacag acactcagtt cattgttctg gtgtgctctg accttctagg cttctctcca 480

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ttcaccttag aaccctact ctcttgctca gctccgtagt aagtttatga ccagtcaaag 540
 caattttgtg cagtgtatgc agaattttct gtgtaagctt tgcattcttt ttggagggct 600
 ttacagaaaa gggaaattac tcanaacaac ttcaatcact tgctacagtt aaaaataatt 660
 tcaccagaca tattaagaga agggtaaaaa ttagttccag aaggattttt tanattgcaa 720
 taaatcaaga ggaanaagnt ataatttcct aattttaaag ataagttttt a 771

<210> 4686

<211> 874

<212> DNA

<213> Homo sapiens

<400> 4686

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 atgccacaaa atgcactccc caataaatta agattaaagg aatgcccaaa ccccaaacat 180
 gatcattgtg atcatttctt atgaaacata agaatgagac ataagaattt tatatgagat 240
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 tgaaccagac tccccagtgc tctatagaac catgagtgaa gcagctctgg tgagaaaaag 540
 gatgaagcct ctgatgatgg acagaaanga aagacagaaa aatagagcct ctattaatgg 600
 acacttctat aaccatgaag taagtgaagt acaattccat taatgtaata taaaataang 660
 ttccctgttt cactaacaat accacccaat tcaattcaca anttaaagtc ataataataa 720
 cagttncatg tccaacatct gggggcactc tccatgtgca gatattaaag taaatgggtt 780
 taaatagatt ttactgaata tcttattaac actanacatc cntggaatag ggtaccatta 840
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<210> 4687

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4687

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aatttgattt gaaaatgagt aagtgcagaa agacaccagt tcagcagcta gcaagtcccg  180
cgtcattcag cccagatatt ctTgctgaca ttttTgaact cttTgccaag aacttttctt  240
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accacactga atttaatgca ttTcttgatt tgaagaactc cctaaatgaa gtaaaaaacc  360
tactgagtga taagaaactg gatgagtggc atgagcacac tgctttcact aataaagcag  420
ggaaaatcat ttctcatgtt agaaaatctg tgaatgctga actttgtact caagcatggt  480
gtaagtTcca tgagattttg tgcagctttc cacttatTcc acaggaagct tTtcagaatg  540
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actacttaaa atcccatcng ttTccctgtc aatgggagtt gggtaacgaa tactccgaat  660
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<210> 4688

<211> 696

<212> DNA

<213> Homo sapiens

<400> 4688

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gaaatatggg ctgcccgtgg agaagatagc aaagctttac aagaaaagca aaaaaggcat  120
cttggtgaac atggatgaca acatcatcga gcactactcg aacgaggaca cttTcatcct  180
caacatggag agcatggtgg agggcttcaa ggtcacgctc atggaaatct agccctgggt  240
ttggcatccg cttTggctgg agctctcagt gcgttccTcc ctgagagaga cagaagcccc  300

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agccccagaa cctggagacc catctccccc atctcacaac tgctgttaca agaccgtgct 360
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 accacggagc cgaagcctga gcccctcagg aaggtgcctt aggcctgttg gattcctatt 480
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 cctaaaaaan tcccatccct tctttctcaa cctccatat ctatatctcc ccganttgg 660
 tggacaaaaa tgagctaacg tctgggggtg caanta 696

<210> 4689

<211> 567

<212> DNA

<213> Homo sapiens

<400> 4689

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 cccaccacag cccactgtct gccttctgct gccctgatca gcagtgcac tgccaggact 480
 gttgccaaag agcacagtgg ccacaccata gtctccctgg atgcancccg cagggacaag 540
 gaggtgaac tccantgcac ccantta 567

<210> 4690

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4690

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agcagtatat taagctctgg gtcttctcat gactaaaatg actatittta aacataagac 60
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aactttcatt acactggata ttaatatataa ttacttcttg agtaatccca gaattgtaga 660
accaattggg agaatcagaa actgtccttg gacttgaggg tttcctccct taaggnaaaa 720
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<210> 4691

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4691

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gcatgaggaa cgtctgggca cgtgtaaagt ggatatctcg gcactccctc tgaagcaagc 180
caactgcctg gagctgccac tggacagctg tctgggggct ctccttatgt tggtcacact 240
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cgtcggcatt ctacaagtga aggtttttaa ggcagcagat ctcttagcgg cagatttctc 420

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agggaagagt gacccatttt gcttggttga gttaggcaat gaccgacttc agacgcatac 480
 cgtctacaaa aacctcaacc ctgaatggaa caaagttttt acatttccca ttaaagatat 540
 ccatgatgtt ttggaagtga cagtgtttga tgaagatgga gataaacccc cagattttct 600
 tggnaaagtt gccaatccct tgctgtccat tagagatgga caaccgaatt gttangtact 660
 aaagaataaa gatttagaac aanccttttaa aggag 695

<210> 4692

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4692

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 gagcaagagc ctacttgtgc ctcccagatg gctgagccct tccgtacctt ccgagatgga 180
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 acacctacca agatactga aattacaact gaaatacatg tctaattgggt ctaattctgc 600
 taatattgtc ccggagacaa ntcctgaatc tgtgcccata atctctgtca ntctgtgtt 660
 tgcangcgtc atgctgctaa aaa 683

<210> 4693

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4693

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accccggtag taaatcatgg ggctggagct caaccccagg gtaggctggc tccagagctg 180
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taaacattag tattattgac ctttacctat agtatancat ggnctattta tgtatccatc 540
tcccctangc atttttctc aaagacaaga accatgtctt acccatctct tgggtaagtg 600
ccta 604

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<210> 4694

<211> 727

<212> DNA

<213> Homo sapiens

<400> 4694

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ggatgttctg ataaatggag caccgcgacc tgccaatttc aaatgtaatt caggttacgt 60
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agctcttcgg cttgcaacaa ctatgacgaa tcatgaaaaa acgaacggat taacagggtc 180
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cctcgatatt ccatcttcaa gttgtttgat agcctcacct tattggcctc aggaagactt 480
atgttccacg ggcctgctca ggaggccttg ggatactttg aatcagctgg ttatcactgt 540

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gaggcctata ataaccctgc agacttcttc ttggacatca ttaatggaga ttccactgc 600
gtggcattaa acagagaaga agactttaaa gagatcatag agccttccan gcaggataag 660
ccactcatag aaaaattanc ggagatttta tgtcaactcc tccttctaca nagagacaaa 720
agctgaa 727

<210> 4695

<211> 631

<212> DNA

<213> Homo sapiens

<400> 4695

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tatgtgcaca atgagctagc caacatggaa gaagatgcca gatcagctgg agtcgctacc 180
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<210> 4696

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4696

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 cagacagaag agaagagtca catcatctag atgatgaatg aaaagatatg tcattattct 180
 cctttgggca gtgcttctgc agaaaagttg caccttctag gtgttggact cagcaatata 240
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 cagcaatata tctcaagcac ttcttgggca aagccaagc agtaaaaaag agtcacatta 360
 cctaggttct gggtatagca atatgtcaca aatgccccta agaagagggc ccaggaaaag 420
 agagtcacct tgggtagaat gtcagagata ttccattttt gggtattcac aaaaaagaat 480
 aaagtcccat aacctagaag gtgggctctg ctccatgaca caaatcaccc tagtgggcag 540
 gtccattaaa gagaaggctg tcaaagcaca tagatgctgg gcaaagtgat atgtcataat 600
 ccccatgatg ataggcccag agacatgtca caatgacctc tttaggcaag aggaccaggc 660
 aagaagaatc acatcacttg tgtgctggcc ctagtgagaa agtcactccc aattctgttg 720
 acatgggncc angcaagaag agcaangtca catttcttaa gcgctgggtc caagagatat 780
 gtcacaaacc ttttaciaa 798

<210> 4697

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4697

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 tgaagggaga gtttcagttc ttcatgtacg gttgctttca agatgtacct gggaattaca 180
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 aagcgagacg agaaaaaata tagagggaaa aaatgaagac tagcacggaa aatgccacgg 480

ggcggctagc tgagttaatg ttagctaaac atgtatagac atagaaattt tgaattgctt 540
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 aaaaatttca tatgcaaata gctccttaca agatagcagg cangaattcc acatcttaca 720
 ctatccaacc tcagagaaac tgttcattcc attcacgttt ggtaaattggg gnaaaaaaag 780
 caacacaant tac 793

<210> 4698

<211> 827

<212> DNA

<213> Homo sapiens

<400> 4698

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 ttgagttttg agagggtttt tatatatacct agataaaatt cctctgtagg atatgtgggt 180
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 gaaagcaaag ccaataatca ctgtaggagt atgagttgcc taagggccaa aactaatgta 420
 aataagagaa agtgtggata taaatgacca ttgtttataa acagtcatga aaaatgctgt 480
 gacttgaaat ctttcccaca tctcccaga aagtaggtag gagtttatcc tttccgtaat 540
 ctctttttta ccctgctgac tattacaggg cttgtttaat cacagtggca agaattacat 600
 gtatcttaca gtaaagaaac agaatactgg aatcgtaga naaccctgat gtgttgacct 660
 ggataaagta caaagggtga aganggaatg agttatgctg ttaaaatctc aggctaattc 720
 ggttaaaggt cccggctact aatgaacca aacttttttt ttcccccttt tgactccttg 780
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<210> 4699

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4699

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ggaaaaaact caaactctga tctacatca ttgtttaatg ttcggcaaac atgaagcatt  180
ttaataccaa aaaaagttag gagaataaat ctacagcataa aggaacaact ttttaaactg  240
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gacaaaggcc catggatcca tatgactgcc tgtctgttct ttttagagac gggcccacac  420
tgcagagaag tgattgtgaa ggtctccaac cctgtcatgc cccacctgc caccttgact  480
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aggtctcagg gagttttcct cttctcctcg gactctttct ctcaaggcct cttctacaaa  600
aacccctgcc cagagggtta ctgctaaaaat gaaactcccg tgtctgtccc cttccctggc  660
ccccaactga cttgcctgcc tctgcttgct gctgtccctg cctattcccc ttcatgccng  720
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<210> 4700

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4700

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atacagaaat ggaaaaccaa ataccacgtt ctacttata agggaaagtg aaacactggg  180
tatacacgga cacaaagatg gaaacaataa actctgggaa ttccaaaagg ggagagatag  240

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ggggtgaggg ttgaaaaact acctattggg tactatgttc actgcttagg tgacaggatc 300
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 cgatgttaaa tcttctttca tcagcacatg tgtattgact gtcactctct accaggctgt 480
 attctaggta atggatgtag gagagaacaa aaaggctctt gctgttctga agcttatagt 540
 ctattgggga gagatagtaa ataagacgga aacaaataaa tacacagttt cagagagcaa 600
 tgagttctac aaatgagcag tgagccctat aaacaaaatt tagattaaat taaattagga 660
 taggtcagcc tctttgttat agcagatgat actttttata tggnttagca aaggagtcag 720
 gaaggaagta attttaaaaa aggaaaacca gnaaaaaacc tcnttaccac ccaactttta 780
 a 781

<210> 4701

<211> 754

<212> DNA

<213> Homo sapiens

<400> 4701

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 aactgtgtgg ttgggctcgg tagcacatcg tgggacttgg gtgtgcgccc acagatgggtt 180
 tggccctgca gtgaccagag cagcccaagc cgccaccatg gtgaaattgc tagtggccaa 240
 aatcctgtgc atggtgggcg tgttcttctt catgctgctc ggctccctgc tccccgtgaa 300
 gatcatcgag acagattttg agaaggccca tcgctcgaaa aagatcctct ctctctgcaa 360
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 ctctgatgca ttttcaacac tgatgccaaag ttcagtgaag gccttgatgc tgtaagggtg 540
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 gctctaccgg ccaaacaagg ggtttggacc aaactgggat tcccaacagg tggacttgct 660
 ggttgtcacc tgataatcag nncaaactan ccacctaggt aagggaaaac tctgtcctga 720

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754

<210> 4702

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4702

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gatgctggag attacagaga cactcaagat gcccttgctg ttgttataga ggtagccaac 180
cacgccaatg acaccatgaa gcaaggagac aactttcaga aacttatgca aattcagtac 240
agcttaaatg gacaccatga aattgtgcag cctggtcggg tttttctcaa agaaggaatt 300
ctgatgaagc tgtctcgga agtgatgcaa cctcgaatgt ttttcctgtt taatgatgcc 360
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gctggaatga aggtcagaaa acctacccaa gaagcctatc agaatgaatt aaagattgaa 480
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gaagcgattt ccagggaat agaagagtat gccaaagaaa gaatcacctt ctgtcctagt 600
aggagtcttg atgaggnaag actcagaaaa taaagaagaa agttagtcct cctggntnga 660
aaggt 665

<210> 4703

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4703

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gattacctgg gtctagagt cgagagctgct ccgtggccac gaggacgtca ccatgcccaa 120

agcaccaaaag ggaaaaagtg caggacggga aaaaaaagtc atccatccat atagtagaaa 180
 agcagctcaa attacgagag aggcccacaa acaagaaaaa aaggaaaaat tgaagaatga 240
 aaaggccttg cgtctcaacc ttgttgggtga aaaactgcaa tggtttcaaa atcatcctga 300
 tcccccaaaa aagagatatt caaagaaaga tgcttgtgaa ctaattgaaa ggtacttaaa 360
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 gaggcggcac tgttcccggg agaccgtcat caagcagacg atggagcggg agcgacagca 480
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 taatgatgca attcccaaga cgtgcaagag gaaaactact ataactgtag accaagattt 660
 gggggaattg gaactaaacg atgaatcaag tgattcagat tgaggaaatg actgcaatgg 720
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 tgattangg 789

<210> 4704

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4704

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 ggctggggcc ggcccaggag cttccccagg gctcccaccg tccatggcgg tgcgggggga 180
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 gaaagccgca tcctgaaatg gcaccagcag agagatcctg gcagtaagaa agattattcc 420
 cagtatgagg aaaacatcac acacctgcag gagcagatag tggatggtaa gatgaccaat 480
 gctcagatta ttcttctcat tgacaatgcc aggatggcag tggatgactt caacctcaag 540
 tatgaaaatg aacactcctt taagaaagac ttgnaattg aagtcgaggg cctccgaagg 600

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aaagagctca atctcatgaa nggagcanca tga 693

<210> 4705

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4705

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gccggaactg cggcagtctc tccctgccag gctcttcac caaggtttct gtggatccct 180
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tactttcttg tcaagatgat tgcaacacct ttgaaacatt caagaattta cttacctcca 300
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tcaggcacac ttactcctgt aaaagatttg gtgaaatata agaactcctc cttaaaattg 420
aatgaccata aaaagaatca gttcctaaaa atgacaactt ttaacaataa aaatatattt 480
caatcaacta tgctaacaga ggctactacc tctaacagtt ctcttgatat cagtgcata 540
aagcccaaca aggatggatt aaaaaataaa gcaaaactatg aatcaccagg aaaaatattt 600
ctaagaatga aagaaaaagt actgcgtgac aagcaagaac agccatcaag aaacagtagt 660
ttgttgggan cacaagaaaa agtggggaata atgaaacctt cactcctaaa cangaggttg 720
aaaaaaaaaa attgcagcat acctaactaa tgtgaagaaa angggaaaca acaaatcaat 780
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<210> 4706

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4706

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gaagtaaadc ttttaattga atttgatgac acctgttttc attttgttcc cccggcaaca 180
ctgctagtag caaaattgcc catagaccac cctgggtttt gaaaagaatg aaatcattct 240
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gttacctgt tgagactcct gtgagagaga ggtaaagctg acacaaatgt tatctttcct 660
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<210> 4707

<211> 836

<212> DNA

<213> Homo sapiens

<400> 4707

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accccttgat aaaggccatc aaggatggcg atgaagaggc cttgaagacc atgatcaagg 540
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 tgtctcctgt caatgctcca agcaaggggc aaaagccgga catctccaac aaatnccgag 780
 aagacaccgc tctaaaaaag cctgtgancc gcaaagaaac gcccggaagg gccntt 836

<210> 4708

<211> 462

<212> DNA

<213> Homo sapiens

<400> 4708

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 gtgaccgtct ggctgctgga gcanaagctg caggtctgct gcanggtgga ggagggtgtg 420
 ctggcanagc tgcaggggccc ctgtccccag gcaccaaccc tg 462

<210> 4709

<211> 788

<212> DNA

<213> Homo sapiens

<400> 4709

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agaaattatc aaacaattga agattgaact caagaaggca caggagagcc aaaaggagat 120
 gaaactattg ctggatatgt accgttctgc cccaaaggaa cagagagaca aagttcagct 180
 gatggcagct gagaagaagt ctaaggcaga gttggaagat ctaaggcaaa gactcaagga 240
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 gatgagat 788

<210> 4710

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4710

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 ctggcatttc tccgcactgt ggtgtcaagg aaagagcatg gctttcatgt cagacacatc 180
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 aagaaacttt cccattccc atagtgtctt taatttgctt taaaacactt gaattagtga 540

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 ttaattccaa tgttcttttt cataatctaaa taatgttggc atactactga caagagaaac 660
 aagacaaatg tgagagatgt ctgcgtttct cctattaaat aatattacaa ttggnatggt 720
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<210> 4711

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4711

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 tgggtgaatat ctctgaacct gggcatgaaa cagagagatg tcctaactct gggtagagagg 180
 aatectcatt tttctctgcc ctctcactgt ggcacccctaa gaaaaaagtt ttgggttcct 240
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 ccaaccaaca aacacatctc ttttttctgt ctattcactg ggaaagtaaa agcagtcctgg 540
 gcgcaggctg gggaccaga tggaattcaa acttatgcct gctctcaagg tgctcacggt 600
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 gaaggctggt ggagtgattc cacca 685

<210> 4712

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4712

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tgacattcag	ggacgtggcc	atcgaattct	ctcaagatga	gtggaaatgc	ctgaactcta	180
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gaacagaaat	catgcattag	gggaaaaacc	ttacangtat	atttgagggtg	cgacaaagcc	780
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<210> 4713

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4713

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atgcategct tcaagagctt gccctatta tatgttacca aatgtgagtt tgatccgttg 720
catacactat tggatgaagat ttcaatcgca ngagcctctt gacttgacaa naatctcctn 780
aatgacctgg gactaaga 798

<210> 4714

<211> 779

<212> DNA

<213> Homo sapiens

<400> 4714

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gactccgcgg gagggcgcg cgttaccctc agctcccagt gtgggtggtg 180
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<210> 4715

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4715

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atgaagactc ccagggtcgc caagaatgan gtgctctggc aaccaacgct gaacttgcca 660
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<210> 4716

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4716

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gcctcatcga caaagtcgac aacttcaagt ccctgagcct atccaagctg gaggaccctc 180
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<210> 4717

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4717

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 ccctaatacct gctccaaaag aactgacaaa taaagaggca gaaaggata tgctgccttc 180
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<210> 4718

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4718

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<210> 4719

<211> 691

<212> DNA

<213> Homo sapiens

<400> 4719

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 caacgagaac tccccagcaa gatgctcctg gtctatgatc tctactttgt ctctaant 660
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<210> 4720

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4720

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ttttctcaan aaggttagaa agcagcattt aaggaaggtc ttctgggaag ccttaacaaa 720
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<210> 4721

<211> 750

<212> DNA

<213> Homo sapiens

<400> 4721

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tgatgtgtct tttggcgata gagtactgct ggctggaagc ngatgtnaaa cctgggattn 720
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<210> 4722

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4722

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<210> 4723

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4723

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agcgtttaca gacaantgag aggatattct cccagcanct tcagaacaag actttcttcc 720
cggaccaaaa cggt 734

<210> 4724

<211> 899

<212> DNA

<213> Homo sapiens

<400> 4724

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<210> 4725

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4725

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gaccacctgt gtantacaaa ttttaaggaaa gaaatttatg ggcttatggn tacgggaact 780
gaangtatca agttaatatc ctaaa 805

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<210> 4726

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4726

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tccaccagct cctgctcaac ccgccaaga agaaagcgat cctgaccacc attggtgtgc 180
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acacaaacac acccagcatc aaccaggagc tctgccggct caacacgatg gacttactgc 300
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 cgctggga 728

<210> 4727

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4727

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 tcccagcact ttggggaagg cgaggcgggc ananacag gtcaggagat cgagaccaac 780

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814

<210> 4728

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4728

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 ttttctcaa gaagcccaaa gcacatgtng antttgg 757

<210> 4729

<211> 862

<212> DNA

<213> Homo sapiens

<400> 4729

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 cctgaggcag ggcccctgca gccgcagcca ccacagattc aaaacggccc catgaatggc 480
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 aacagagagg tcagatggcc tacagtggc agctgancaa gccttgtaac ccaagcaagc 720
 ctaaggcaaa aaacatctcc cgtttaagtcc aataccctg cagctcatct tgaaataaag 780
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<210> 4730

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4730

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 acataaaaaga taaagtactt gaactattga tgtattttac aaaacactca gatgaagaag 180
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aggcattttt tcacacccag tcaagtgtac gccactttgc cctaaatgtc attgcattga 540
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 caagacccag aacctgctat gcggaacaag ggtgatcagc aacttgtggg aatagacaaa 660
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 aca 723

<210> 4731

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4731

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 gtcgcctcac ccgggaagcg caaggggtca gggaactccc tcccctagcc aagggaagct 180
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 tttcaagcaa aaaactgggc agccatttgg gcagacactg agctagcagc aggagttttt 360
 ttcataccct agtagcccct agaatgccag cgagacagaa ctgttcactc ccctggaaag 420
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 aacaagctaa gacccactgg gttgaaattc tcgctgccag cacagcagtc tgatgtccac 540
 ctggaatgct tgagcttggt gcagggaggg gcgtctgccca ttactgaggc ttgattaggc 600
 agtttcccc tcacaagtgt aaacaaagct gctgggaagt ttgaactggg tggagcccac 660
 tgcancctcg caaaagttgc tgtagcaaga tgtctctcta gattcccctc tctgagcaag 720
 gcatctctga aacnaaggna aca 743

<210> 4732

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4732

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ggagggtccac tccagaccct gtttgccctga gtatcaccag cagaggctac agaacagcaa 180
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ttgccatttc cctgtggctt tgtttacact atgaaggga aaaccacctg ctcaagcctc 660
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<210> 4733

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4733

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tgtatttgtt ttgacgtag aggtttcaat tttttcacct tgggggcaaa tgaaaaactt 180
ggcatttttc atttgggaac atataatagc ttgtaaactt ttcagacagc agtaaatgtc 240
tgaaaaaata tcaaaaacag cataaagaca agattatgta gctctaatta tacgtatata 300
attataaaaa acaatgtgca agggttatat ttttaaggtct tttaaaatct gattttgatc 360

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ataccaaag acataatatt ttttatggta gccttttact ttcaagactt aattttcaga 420
 cttgtacaag ttccttctta cattctttcc ctctcacacc atcctactgg agaaagcata 480
 cttttatgct aagatcttac ttttaagcttt ttatgtgaac aaaagatgta catatagtaa 540
 gtattacttc cgtagtcctc aaatttacta taacttttgt acttagtata tgttttatat 600
 ttggaaaaca gcactacgct tagttttcct gtagttcctg agtgatgtct gtgtgttcct 660
 tgcctgccct tttttgtgag cacagattan tcngttatcc atggctggca cttcacttat 720
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<210> 4734

<211> 875

<212> DNA

<213> Homo sapiens

<400> 4734

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 ctacaacagc agtgctcttg ttaatacagg tctctggttt atgcagaaat ggaaaaaatc 180
 aggttcgctt ttgcagctga catgtcgaga tctctcagac cctcgccaaa cttttttata 240
 taagcttagt aacaaagcag ggcttcatta tttcaaaaat gttgtgctag tgggatccct 300
 acaggatcgc tatgttcctt atcactctgc ccgcattgaa atgtgtaaaa cagctttaaa 360
 ggacaaacag tcaggacaga tctattcaga aatgatccac aacttgcttc gacctgttct 420
 gcaaagcaag gactgtaatt tggttcgcta taatgtcatc aatgcattgc ccaatacagc 480
 tgattcactc attgggagag ctgcacatat agctgttctt gattcggaat tatttttaga 540
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 tgataagttc taagaaatat ttataccttt ttatatggaa gataatttat atcatccatg 720
 tttagtgtt tttaaacatc aactttactt tccaggtaat gtggctgtgc aataattttt 780
 taattttacc tttttacttt tccaataacn ttttcaaaaa attttggcna cctaaggtaa 840
 tttcagtnga aaacttttaa agccccatac cctgg 875

<210> 4735

<211> 846

<212> DNA

<213> Homo sapiens

<400> 4735

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attacctgaa gcgcattcag acaacgtggc taccittatc atttcattca accctgagtg 180
gccccaaaca aggcctcagg ccggccactt ccttccactt cttggtctga cctctccatg 240
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gcccaggctt gctggagttg gggttatcca cagtcagagg ttcagagttg tcaaattctc 360
caattagagc aagagatgag gaaaggaaaag ggagacgaaa gaaagaggct gtgcctcaga 420
aataataacg ccgcatactt acaactatct gatctttgac aaacctgaga aaaacaagca 480
atggggaaaag gattccctat ttaataaatg gtgctgggaa aactggccaa ccaatgtaga 540
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gacttaaacg ttagacctaa aaccataacc taggcattac cattcaggac ataggcatgg 660
gcaaggactt catgtctaaa acaccaaaac caatggcaac caaaggcaaa attgacaaat 720
gggatctaataaaactaaaa gagcttctgc acagcaaaaa gaaactacca tcagnagtgg 780
acaaggcaac ctacaaaatg gggagaaaaat tttcgcaacc tacnccatcn gacaaaaggg 840
ctaaat 846

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<210> 4736

<211> 890

<212> DNA

<213> Homo sapiens

<400> 4736

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 ggttaaaaga aaaggtccat ccacatcgtg gcgctgggga acgaggggga cacattccac 180
 caggacaacc ggccgtcggg gcttatccgc acttacctgg ggagaagccc tctggtctcc 240
 ggggacgaga gcagcttggt gctgaacgcg gccagcacgg tcgcgcgtcc ggtgttcacc 300
 gagtatcagg ccagtgcgtt tgggaatgtc aagctggtagg tccacgactg tcccgtctgg 360
 gacatatttg acagtgattg gtacacttct cgaaatctaa ttgggggcgc tgacatcatt 420
 gtgatcaa atacaacgttaa tgacaagttt tcattccatg aagtaaagga taattatatt 480
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 agtacaactg aagggatcca acttgcaaaa gaactaggag caacctatct tgaactccac 660
 agccttgatg acttctacat aggaaagtat ttggaggag tgttgagta tttatgatt 720
 caagccttaa atcagaagac aagtgaaaaa atgaagaaaa gaaaaatgag caactccttt 780
 catgggaatt agaccacctc aacttgaaca ancangaaaa aatgcctgtc ctaaaggctg 840
 aagcgtcaca attataactc tgacntaaat aacttgctgt tctgctgcca 890

<210> 4737

<211> 894

<212> DNA

<213> Homo sapiens

<400> 4737

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 ttcttggttt cagtaggggc aacaacagtc cacttctcag acaaacaatg gctttgtgac 180
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caaatggtga tctgtcgtct ccaaaaagaa tttgagagac attttaagga cctcaggttc 480
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 agaatacaag acttggggca gttttatgct ggattgtctg ctgaatccta cccaattatc 660
 aaaggggttg cctgtaangt ggcatccttg tttgatagta accaaatctg tgaaaaggct 720
 tttcatatth gactcgaaac caacacactt tgagtcagcc attaacagat gagcatctcc 780
 naagccctgt ttccgggttg ccacaactga aaatggagcc ccggttggga tgaccttgtg 840
 agangaaaga aatgaatcca atccataagg gctttgtngt anaaagattg aaaa 894

<210> 4738

<211> 743

<212> DNA

<213> Homo sapiens

<400> 4738

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 cagttctccc tgtatgggtg ggagaattgc ccattctttc ttacttctga caactggctc 180
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 gtggtcactg ttctcttcta taccctttta tgtattagtc cataagcact aagttttgaa 360
 agcactaaga catctagag tccttgattg ttcaccata cttccatttc tttattcaat 420
 aaacatgtat taagttccta ttatgtcaga tgtgcaaatt cttatggtaa taaaaagatg 480
 tatgagacat agacacttta tttagtcaaa cactcaaaa tatttgaaca tctactgtgt 540
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 ctcttcactc cactggctgt aacacatttc tactctgaga tcttcatggc acaacttctt 660
 gaacaagtgt tttcaatagt cactcncctc anattttttc ttccanttcc tcaaacatac 720
 aggaagaaaa cggtgtggtt ggg 743

<210> 4739

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4739

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gaagatgttg tcattgacat ccagtcactt ctttctaagg gaatcagagg caatgagccc  420
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agttanccca agaagattct ctctacatg ggcaattttc acaagcagtc actcccccta  720
acccatcatc acacaagatt tattcaaaag nccaaccgat tatctcaatg gngaagaaca  780
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<210> 4740

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4740

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 tgggggggaan tcatagaagt aacagtttta catattgatc aagttgggat gtcctggagg 720
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<210> 4741

<211> 755

<212> DNA

<213> Homo sapiens

<400> 4741

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 tgtagagac tgaagattgt tagggcacct tagaatgtct catcttttct aggttgtcaa 180
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aaactcctaa cctcngatc cgcctgcctc gacctccaa agtgctggga ttacaggcat 660
 gagccacat gccagccaa agntcatttt ttaaataagac ttcaaccctt tgtaaatact 720
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<210> 4742

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4742

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 gcaagaagca agctagaatc tcnttgcan a gaattcanc gtcacaataa 710

<210> 4743

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4743

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<210> 4744

<211> 813

<212> DNA

<213> Homo sapiens

<400> 4744

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 cagatcacc atgtttcttc agcagactct cctgctaccg ttgactcaga aacaataaca 240
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gccctagaag cagacacttt cccagatgaa attcatcacc ctaagatgac tgtggagcca 660
 tcatttaatg atgctcatgt atccaaattc agtgaccaa atagcacaga actgatnaat 720
 agtgttatgg tcagaacaag aagnaagaaa tctctggaca ccggacctta aacaaagagg 780
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<210> 4745

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4745

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 tgtttactaa gaatgtcac cagagtcaca gtcaccttgc aatgccata accatcaatg 420
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 aagtgatcga agccaactac cactcttcca atgcctacca caactccacc catgctgccg 660
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<210> 4746

<211> 798

<212> DNA

<213> Homo sapiens

<400> 4746

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tggtcatgt tctaaaggct gctagcagaa attgagcctg gtacatactt aaaggaaggt	180
gatgtgttaa gaagtagctg cacaaggtag ggtggatgaa gagcttactg gtgagattta	240
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tattccatag gaatagggtt tgggtggtctg gaagcaatga atagcatggg aggatttgga	360
ggagttagcc gaatgggaga gctgtaccgt ggtgcatga ctagtagcat ggagcgagat	420
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ggtggaatgg gtagcatgaa cagtgtgact ggaggaatgg ggatgggact ggaccggatg	540
agttccagct ttgatagaat gggaccaggt ataggagcta tactgggaaa ggagcatcga	600
tatggatcga ggatttttat cgggtccaat gggaagcgga atgagagang agaataggct	660
ccaaaggcaa ccagatattt gtcaagaaat ctaccttttt gaccttgacc ttggcaagaa	720
aactnaaaag gagaaaattc aagtccagtg gtgggccaaa ggtaaatggt ttgccaana	780
aaantaaaaa aatggggg	798

<210> 4747

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4747

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ccccgcgtg ctgggcgaca gggtcgctcg cgcggttct cttcaagctg cccccacccc	180
gaccacacca aggaagccgc cgaggccgag tcagggatgg cccccggcgg gcctggggaa	240
ggcgacggaa gcttggtgaa cgcttctagg gacctattaa aagagttccc acagcccaaa	300
aatcttctca acagtgtgat tggaagagcc ctcggcattt cacatgcaaa agacaaacta	360

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 gctgcancct gccagctggt caagggttgg ggtctgctag gtccccggaa tgagttgttt 540
 gacgcagcca aataccgagt gctagctgat cgctttggnt cccctgccga nagctggtgg 600
 cgtccggaac ccatnatgcc cctacttcct ggCgg 635

<210> 4748

<211> 849

<212> DNA

<213> Homo sapiens

<400> 4748

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 aaacttcagg ctttgcaaag agtccttcaa agtgaattct gcaatgctgt gagagaggta 180
 tatgaacatg tctatgagac tgttgacatc agtagcagtc ctgaagtgag agcgaacgct 240
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 aactctccaa tctatatatc ccgaataatt ccaggtggaa ttgctgatag acatgggggc 420
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 gaaaaagctg tagaactgct gaaagccgca caaggaaagg tttaaattagt ggtacgatac 540
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 ttatcatgaa attccccctt gtcaatttta taaaatgcct aattttaaca atccantttt 780
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<210> 4749

<211> 787

<212> DNA

<213> Homo sapiens

<400> 4749

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acgtattgat tatagcagta ctatagttat tctgctgtca ttattaaaga tgattatatt   180
cattcaaagc tttagatgtg tcccatgtgg caagaaagga gacagtgaat tttgtcaaac   240
aataaaaaatg tgtcaggaac acaaggatga aggggatgtc atttgcctgg taagaactgg   300
gttattttcca ctgaaatttg ttatgtttta ggaaattaag attttaagct tgaaattata   360
caagcagaat ctaatttaat tttgattgac tgaagaacca gggctctttg ctctcctttg   420
gtatttcact ctcttttggg attcaatcat gtgtctttta gtgcttttta aaattttacc   480
cattctttta ttcagcatct ccctatgtat gtgtcataga atacttagtt ctgctagata   540
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gggctcaatg ttttccaaa ctttatttga ccccaaaaac ctttttcata tacccaataa   720
taagctacag nanctaatat tccgcaa atg gtcccttggg aacacactgc cttaa acagn   780
taattcc                                     787
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<210> 4750

<211> 625

<212> DNA

<213> Homo sapiens

<400> 4750

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actcta atcc gtgctggaat gacagaagag gcacaacgac tctgtaa acg ctgtgtgtcaa   180
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gcatggagag ctgcaacact tgaaggctgg aaactgtacc atgaccctaa tgttaatgga 240
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 gtttttgagg aacttcaagc tactgacaaa aagagagttc tggaanagaa tcaagancat 600
 tancatatag ttcaaaagtt tctta 625

<210> 4751

<211> 707

<212> DNA

<213> Homo sapiens

<400> 4751

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 tctgaataaa ggatgagccc agggcctgct gcccactgtc tgctctgatg accctctctc 180
 ccctgcagat ccgagtgatg gtggacctgt gcaacagcac caagggcac tgcctcacag 240
 gaccttctgg accaccagga cctccgggag ccggcgggtt gccaggacac aacggagtgg 300
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 ccgcaccctt ctgctgcaga tgggaggtgg aaggagcan gagccacag ccctgggaag 660
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<210> 4752

<211> 431

<212> DNA

<213> Homo sapiens

<400> 4752

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actgagcaga gcagagcatc tagccaaagg ggagatgagt ttgtctgtcc tctgctgagg 180
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gaggtggcgc cgggacttta accccttggt ggctctgcgg caagggattt aaccctttgt 300
ggatctggcc cctcgggtggc agcgtcatcg gtagttttaa ccccttcgng gctggntttc 360
acgcactgga cttaccctca tcaccttgct caccaactcc tttattgggg tgctccgctt 420
ggaggtttgn c 431

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<210> 4753

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4753

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aaaagcccgg gccgaacggc cccgccgcag agactcagcg cggatcgctg ctccctctcg 60
ccatggcgca ggtgctgac gtgggcgccg ggatgacagg aagcttgtgc gctgcgctgc 120
tgaggaggca gacgtccggt cccttgtagc ttgctgtgtg ggacaaggct gaggactcag 180
ggggaagaat gactacagcc tgcagtcctc ataatcctca gtgcacagct gacttgggtg 240
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tgttagccta tggcgttttg aggcctctaa gctcgcctat tgaaggaatg gtgatgaaag 360
aaggagactg taactttgtg gcacctcaag gaatttcttc aattattaag cattacttga 420
aagaatcagg tgcagaagtc tacttcagac atcgtgtgac acagatcaac ctaagagatg 480
acaaatggga agtatccaaa caaacaggct cccctgagca gtttgatctt attgttctca 540

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caatgccagt tcctgagatt ctgcagcttc aaggtgacat caccacctta attagtgaat 600
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 ttatgaagct ggtacgaaga ttgatgtccc ttggggctgg ggcantacat caccaagtta 720
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<210> 4754

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4754

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 gcacaaaacc tggctcctat caagcttctg catctatctt ttttctatt tttctctcaa 180
 ttattggaag ctcatagaag cattttggga tagaatttta gtagtttgca agtattttta 240
 aacatcttat cataggtaca cttataattt tgatatgac tcagtattaa cctgataact 300
 cccaaattga tattttccta gttcaactga aattaaagg agaaatatgg gattgtagga 360
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 tagtcaactt tctaatacaa tgttaaagtt tatatatttg taaatgttat tgttataaaa 480
 gcataaaacc agaaattaag tcttagattt agtttctaca tcttttattg gaagatgact 540
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 ttattaaaca caaaattgcc antgtttcaa gtagttcccc ggatcgatan gaccaacaac 720
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<210> 4755

<211> 697

<212> DNA

<213> Homo sapiens

<400> 4755

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agaattatgg cgacctccgc gacgtcgccg cacgcgcctg gttttccagc tgagggtaga 60
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tggggttgat antgccttaa aagatgctga aaaagtccac ttcctcctag tgggaaaagg 660
tgaccacaag attcaagggg ggatgggaaa cncagaa 697

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<210> 4756

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4756

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ccccgcgggg agttaaacgg cagcgccgat ctagcagtgg ggggtctcag gagaagcggg 180
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ccgggcccga gcataagggc cacaaggagc ggcacaagca ccatcaccac cgcggccccg 480

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atggtgatcc cagctcctgc ggaaccgatc tcaagcaciaa ggacaagcag gaaaacggcg 540
 anaggactgg aggggtgcct ctgatcaaag cccaagaga gaaacaccag atgaaaatgg 600
 taaaaccag agagccgatg atttgtcct gaagaaaata aagaagaana ngaaaaagaa 660
 acaccganaa 670

<210> 4757

<211> 809

<212> DNA

<213> Homo sapiens

<400> 4757

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 gacgagccac tgggagttaa nggagcaatt ctttcnccaa cctgggatga cagttcagat 780
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<210> 4758

<211> 898

<212> DNA

<213> Homo sapiens

<400> 4758

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<210> 4759

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4759

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atcctagggt gagttaaag tccctgggtgc atccaataat taanatgggc aaggttttgg 780
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<210> 4760

<211> 626

<212> DNA

<213> Homo sapiens

<400> 4760

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<210> 4761

<211> 825

<212> DNA

<213> Homo sapiens

<400> 4761

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ttatttacta tatgatcatg aagcacaaca ttataatagc tacacttgta agttcacagg  180
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gccttctgaa gtgaatcaga acacagcaga gaatattgag aaagaaagat ctatgcttcc  360
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gcaagaaaac tcaactgtgg aaggcagtg tgaagcactg gtcacagact tacatacgcc  660
aattgaagat acttggnatg atttgtgtca tccaggtttc caggagagga aaagaacaag  720
aattgcttta atgangccca tggttactca aggattcctt aagtaaattc aggaaaccnc  780
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<210> 4762

<211> 710

<212> DNA

<213> Homo sapiens

<400> 4762

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ggagtgaact agaaaaaagt gcttactagg gcctaagagt tgctttgtgc cgtgtagtct  120

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ggcctttgca ctagtagatc attgctgaca taggtcagtt tagagacctt tctgtgttaa 180
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 cttttaatca agatacctgt gttgctgtta nctgaactgt agtgaagcat cgatccaaat 660
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<210> 4763

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4763

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 ctatgtccga ccgtttaagt gaaatcgctc cccagtgggc cccgctcccg tcaccacccc 300
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 taattagggc catagaaccc tacataagtc gattggaagg gtggttacia gatcttcttt 480
 tcaaatttac tcaagcttgc ggatttcctg agagtactct gagtattatt gctttgtact 540
 aaaacacagt atgttantgt atttaagtgc cattataagc agttttgcta agcgaaaaat 600
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 ggtttttgaa acnatca 677

<210> 4764

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4764

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cgtttgattt gcaaattttg tggactttaa ccctagtggg acatgcatag cttcagcagg 180
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ctttcttttt gattcctacc aacaacaaac aagaaacca gtgggtaagg actcctggcc 720
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ccctttaaa 789
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<210> 4765

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4765

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 acatgctccg agatgatgga ggctttgagt acaagcgggc cattgtggac tgtataatca 660
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<210> 4766

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4766

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 agaaaatgta acctttgtga ttggttttacc ttttctttaa ttctaggggtg ggtatatggc 180
 tgccaaggtc cagaaattgg aggaacagtt tcgatcagat gctgctatgc agaaggatgg 240
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 gctcaacaac agggtaaatc acatcggtta gaagattgaa acngnaaatg aagtcaaagt 660

caatgggcat gaacagttgg aatgaagaag atgaaaataa tggattttta gtttttgggg 720
atctgggagc aaaacctcct ccgggggaaag ggaaacaaga atgggnantc ccgcatccca 780
ana 783

<210> 4767

<211> 651

<212> DNA

<213> Homo sapiens

<400> 4767

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ggacatccag atgcataaaa atgaatctag atattttgca tttcctgtac cattttgtat 180
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ttttgcaa attttctcca aggctgttgc ctgccttggt ctcttgacat tgtcttgagc 540
agcaaaaaaa atcctaggct gcaagttaca gatttgggaa agttaangag catattgggtg 600
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<210> 4768

<211> 891

<212> DNA

<213> Homo sapiens

<400> 4768

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 caaatgtata tcaacttaaaa atgtcatata ttctgtctgc gtaaaactaag gtatataatt 780
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<210> 4769

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4769

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 cccaacagct ctactttcta catctactct ctaccacgc aaaacttctt tcagttccat 180
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 cctgggttat gtacccttcc caaagtgcac ccagacacc caacagtttt tccagcccag 360
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atattagttg actgaagaat gactatgtgg taatctattc cattggtggc ctccagtga 540
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acagaatgct gcagaagcga caccctgcca cttgtgcttt tgtgaccta gccaccagta 660
agaagccctg tgaccttgct gagacctgaa gagacacata gaganggcac ttgaanggca 720
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tna 783

<210> 4770

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4770

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ttttttttga gatggagtca ctctgtcacc taggctggat tgcaatgggtg caatcttttc 180
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tcaccaaaag tactcangaa gccaaagggtg gaggaccct gcagcacang agttcaaggc 480
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tcagaaagga agaaaaatta tccacttgta ggttgtctct aattacttcc ctgacccgca 600
ctcttcattt gtccaantgc tgcagctgtg ctctcaacaa nttttacaac ttctgggaaa 660
natgcccattg g 671

<210> 4771

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4771

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ccgttaggct gaagattgca caaacatgc taatggccag catggatgga gggagcgtgt 180
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<210> 4772

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4772

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cagccttgag tggtgagcct actactctga ccaaggaaga agaaaagaaa cagcctgatg 180
aagaacccat ggacatggtg gtggaaaaac aagaagaaac ggaccacaag aatgacaatc 240
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ataaagagag catagctgaa tcaaaatccc cagagatgtc catgcaagaa gattgtatta 360

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gtgacattgc ccccatgcaa actgatgaac agacaaacaa ggagcagttt gtgccaggtc 420
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 ctgatctatt ctaccttcct tacgagcatg gacccaaagg agcacagatg ttacgggaat 540
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 aaaaaattga aagaatggcg ggtcacgaag cagccaaagt tttgaangan attgtgtggg 660
 acctan 666

<210> 4773

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4773

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 attaggagga gttttgaggc agcagctggt tgtcagtaaa gaattacgga tgtatgatga 180
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 aaaaactgct gttgatacag ttttcagatt tgatcctcgg tataataaat ggatgcaggt 360
 tgcatcatta aatgaaaagc gcacattcct tcacttgagt gccctcaaag gacatttgta 420
 tgcagtttgt gggcgcagtg cagctggtga actggccaca gtagaatgtt acaaccaag 480
 aatgaatgag tggagctatg ttgcaaaaat gagtgaaccc cactatggtc atgctggaac 540
 agtatatgga ggcttaatgt atatttcang aggaattacc catgacactt tccaaaatga 600
 gctcatgtgt tttgacccag atacaagata aatggatgca aaaggctcca aatgactaca 660
 gtcaanaggg cctgcaattg catgtgtaca gtttggggan aagcctccaa ggn cattggg 720

<210> 4774

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4774

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aagggccgtt tttaaacttt aagcactagt gggattgaaa cctaacctta atatttgact 660
aaaattgcct gtggaatttt gggaaactaa gttttaantt ttaaaaggca attggttaag 720
tgnaattaac ccttaccnaa aatttatcaa cttaagg 758

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<210> 4775

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4775

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gaaaagaatt ataggaagct agatgaattg tttatctaag ttgtcaatgc aaagcaaagt 360

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ttgtttttatc tgtatcctgt attattttgt aacaaaccct gaacattttg tttcattcat 420
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 atttatattt tcaaataatag ctagtcagtg ttcagatttt cctgttagtc tcaaaattct 540
 ttcttatggg gtgtttattg taatcanggt ccaaataata tctatatatt gcaattggnt 600
 gatatgtccc aagtgttttt tgatccatag nttatcca 638

<210> 4776

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4776

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 aggcgccccaa atccagccat tacctgctgg actgcggtat atcttcagnc acaggaaagc 660
 cagnntcaaa aacaaaaatg g 681

<210> 4777

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4777

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ttcccttggt tgca 734

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<210> 4778

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4778

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tagctgccag aaggctatgt tccagtgtgg gttattgcag cagctttgta ctatcctaatt 480
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 aagaccggca attgtagtac ttcccaatgt ccatgggttaa tgaaaaggca gccatttggt 660
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<210> 4779

<211> 834

<212> DNA

<213> Homo sapiens

<400> 4779

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 ttttatgaaa atattttata taataaaatt taaaaggctg ggaaagccaa aaaaatagcc 780
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<210> 4780

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4780

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gaaccatggg gttataaatc tcaagggact cctatcaact tcangtatct cagtgttctt 660
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tgntagctga attaaaaa 737

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<210> 4781

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4781

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tttgaggcat tgacagttgt gattcagcac ctgctgtctg agcgggagga agcactgaaa 240
caacacaaaa ccctatctca agaacttggt aacctccggg gagagctagt cactgcttca 300

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accacctgtg agaaattaga aaaagccagg aatgagttac aaacagtgtg tgaagcattc 360
gtccagcagc accaggctga aaaaacagaa cgagagaatc ggcttaaaga gttttacacc 420
agggagtatg aaaagcttcg ggacacttac attgaagaag cagagaagta caaaatgcaa 480
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gctagccact cagagaaact tgaattgcta aagaaggcct atgaagcctc cctttcagaa 600
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ggaatcgcta gagaagcaaa tcaatgatct gaagagtga atgatgcttt aaatgaaaaa 720
ttgaatcagg agaacaanan aggaagagca aggggaaaaa gcaaatttga aaaatccnca 780
gattaggtat ccagaacaag gagttagaaa gcctgaaagc tgtgttagag 830

<210> 4782

<211> 634

<212> DNA

<213> Homo sapiens

<400> 4782

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gcacaggccg agtgcaccacc caggagccca cccacaggga gcccaccagg caagcagcct 180
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gggtcaacgg cgggtatgag tcgtcatccg aggactccag cacagcagag aacatctcag 360
acaacgacag cacagagaac gagggccccg agccgaggga gagggttccg agtgtggccg 420
aagcccccca gctcangcct gcagggaacng cagcggccat gaccagccgg caggagtgtc 480
agctgtctcg agaatctcag cacataccca ctgctgaggg ggcatcagga tcaaacacgg 540
angaggagat caggattgga gctaagccct gacctcatct caantgctt ggncccttga 600
aaagtacctg gacaatccca acgcccctcac agag 634

<210> 4783

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4783

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ttctgcaagt atgcacaagg tgcagacagt gtggagccta tgtttaaaca tctgaaaatg   60
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gaggtgaaac gtgttgaga tacccttcta ggtatggcca cacagtgtgt ccaggtaaaa  180
aatgtagtga agacctcacc tcaaaccctt tccaatcttt gcctgaagat aaatgcaaaa  240
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gtcatcttcc tgggagcgga tgtcacacac cccccagcag gggatgggaa gaaaccttcc  360
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gtgcagactt cccggcagga gatctcccaa gagtcctct acagtcaaga ggtcatccag  480
gacctgacta acatggntcg agagctgctg attcagttct aaaaaatcca cacgcttcaa  540
accactcgg atcatctatt accggtggag ggggtatctg agggacaaaa tgaaacaggt  600
agcttgggca gaactaatac aattcgaaag gcatgtatta gcttgggaag angattaccg  660
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<210> 4784

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4784

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gaacagttgg gactagaagc aaaagtgatt ctgggactaa aataggaagc agatgtcctt  180
tcccaatgtg tgttgctgtc ttcacctgaa tgcatttgtg taaaaatagc ggagggacaa  240
tgtgaacatt tgtatttgga agctatgaat ttactctgaa gtttgcagtt gtttccaatt  300

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tgtgagctct aagagtttct gcctgtaaga actactctcc ttttatTTtg atTTTTaaaa 360
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 cctcagaaaa tattttaagt tantttaagt tattaaggaa gggatgattt ggagacaagg 660
 agtaatgaaa gatgggtaaa aactgggaaa agattctggn gccaaagtact accccttcaa 720
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<210> 4785

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4785

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 tctacatcac tgtaagatga ctatcattaa caataataca gagttttcag tagctaggag 180
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 taccctgatac tattcaccac acaccatcac tatgtaaaaa tgtgactaga gaactgatgc 300
 ttggattttg ccagtgagaa gttcctgggt gccaggcaag gtggctcatg cctgccatac 360
 cagcactttg ggggtctgag attggaggat tgcttgaggc caggagtttg aggctgcagc 420
 aaactaggac tgcactactg cactccagcc tggggaacag aacaagaccc ccatctctac 480
 aaaaaataaa aatagctggg gatgatggca gatgcctgtg gtcccagcta cctgggagac 540
 tgangtggga ggattgcttg aaccangtg ttggaggctg cagtgagtca nggactgcac 600
 cactgcactc caacctgggt gacagagt 628

<210> 4786

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4786

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aaagcactag ccacttacag caaagacttt atttttgtac agaagatggt gaagtccaag   60
acggtggctc agtgcgtgga gtactactac acgtggaaaa agatcatgcg gctggggcgg   120
aaacaccgga cacgcttggc agaaatcatc gacgattgtg tgacaagtga agaagaagaa   180
gagtttagagg aggaggagga ggaggacccg gaagaagata ggaaatccac aaaagaagaa   240
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tgtggggctg tgttcagctc ccgacaggca ctgaatggcc atgcccgcac ccacgggggc   420
accaaccagg tgaccaaggc ccgaggtgcc atcccctctg ggaagcagaa gcctggtggc   480
accagagtg ggtactgttc ggtaaagagc tcaccctctc acagcaccac cagcggcgag   540
acagacccca ccaccatctt cccctgcaag gagtgtggca aagtcttctt caagatnaaa   600
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<210> 4787

<211> 649

<212> DNA

<213> Homo sapiens

<400> 4787

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cagccgcaag cgccgaggag ccggaagaga ggcggaaagg gcagcaggct ccttaccag   180
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cattacgggt ggccgtgtgt agccaagttc aagctctccc tccgggaatg cctgccgcgg   300
cggcggaata cggtttcttc aggacattca gcaaagcggg gaggcgggga cctgcgggcg   360
gaggagcgac gccccagctg ggaacgcggc ggacgggcga gcgggggggt cgccctgggc   420

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gcgccaggcc gcagaggctc cggggaaaagt tctcttggcc gcgcgagtgg tggcgccccg 480
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 gaancggacc ccccagtcca gcgctggccg cggcagggga gccccttctg ggcggggtat 600
 cagctggggg cggangggcg ggggcaaaag accgttggnc ccaancggc 649

<210> 4788

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4788

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 tggcctggca gatgagagag gagaaactct ccacaatgaa ggaaaagcac tgacagtatt 180
 tgatagcttt agtcaaactg tgcttgagtt tggcttagat ttatgccagt ggaacctgtc 240
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 atatttatct cacaccaacg gctttatcgt aggagcgtct tcgcctcccc cgtttccagt 360
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 ggcggcncctg ctccccgacc tactggtctt tcggaagcct cggggatggg aacccccgagc 720
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<210> 4789

<211> 627

<212> DNA

<213> Homo sapiens

<400> 4789

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gctgtggccc ggagcagcgc tgctgggtgct gttgggggtg gcagccagtc tgtgtgtgcg 420
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agaccaacag agctttacgg ggtcccggac ctactccttg gtcgggcang catggccagg 540
accctggcgc gacatggcac ccacaaggaa ggacaagctg ttgcaattct accccancct 600
ggaggattca acatcttcca ngtacca 627

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<210> 4790

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4790

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cgagagggct actggggccc cagcacctcc acgctggact ggtgcgagga gaactactcc 120
gtgacctggt acatcgccga gttctggaat acagtgagta acctgatcat gattatacct 180
ccaatgttcg gtgcaattca gagtggttaga gacggctctgg aaaaacggta cattgcttct 240
tatttagcac tcacagatgg agtctcactc tgtcgccgag gctgaagtgc agtggcacia 300
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aagtagctgg gactacagtg gtaggaatgg gatcctgggtg cttccacatg actctgaaat 420
atgaaatgca gctattggat gaactcccaa tgatatacag ctgttgcata tttgtgtact 480
gcatgtttga atgtttcaag atcaagaact cagtaaacta ccactgtgctt tttaccttag 540

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ttctattcag tttaatagta accacagttt accttaaggt aaaagagcca atattccatc 600
 angagtctca ctctgtcacc ccggtgaag tgcaatggca caatctcggn tcaattggna 660
 cctccaactc ccaagtcag tatggaatgt tggcttttac attaagaact tcgattcnat 720
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<210> 4791

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4791

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 tgggcgtcgg tgctgcgtgt ctgggacatg tttttctgtg aaggcgttaa gatcatcttc 180
 cgggtggccc tggctctgct gcgccacacg ctgggctcag tggagaagct gcgctcctgc 240
 caaggcatgt atgagaccat ggagcagctg cgtaacctgc cccagcagtg catgcaggaa 300
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 aatgcagccc agctcaagaa gtggcgggaa acgcgggggg agctgcagta tcggccctca 420
 cggcgactgc atgggtcccc ggccatccac gaggagcgcc ggcggaaca gccaccctg 480
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 ctggaggggc cccgtccccg ccgnccccc tccgcagagc cagtgtggg cctgccccaa 600
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<210> 4792

<211> 583

<212> DNA

<213> Homo sapiens

<400> 4792

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 gtaaagtac tcaaattaaa acggcactca agtatacttt gggatttggt gtgatttggt 480
 cactgcttcc ttanttggt gcctttgttc cattgaatgt tcccaataac aaaaattcta 540
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<210> 4793

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4793

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 gtgtccttgt ttttagggaa caaacactga aatatacaat agtagagagg catcatgtct 180
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 gagagaatgg tacagccagt gggacaagtt gtaagcaatt ggtgaatcta ggtaaagggt 300
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 ggtggactgt ctcaagtggc cttaatcggg gtgctgacaa catccagacg agcacgcagg 660
 cttctctccc tgccacagcg gtgccattct ccaacggact ctgccgccgt ggctgcaaga 720

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tnaagggcc 789

<210> 4794

<211> 812

<212> DNA

<213> Homo sapiens

<400> 4794

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acttcaagaa ctggtaaatc aaagtaaggc cgctcctcag tctcccagtg tacccaaaaa 180
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<210> 4795

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4795

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attgtcctcc ttcgggggag gtaagtatat tcttcatata caggtaagag tgaaatgata	180
gaagaatgtt cctcctctcc ttttcttctt ggacaacaga tcaaataattt ctcagatctt	240
ttacagctga attggagtca catggacagg tatgatctta aaatataaaa aattatttta	300
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gattaaaaaa tttatccaaa aaagtttgaa ttttatatga aacaggatag aagatgaaaa	420
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ccagcacttt gggaggctga ggtgggagga ctgattgagg ctaggagttt gagacctgtt	540
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<210> 4796

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4796

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tgттаagtтc cttcaggcta gtagctacac cttgttgcat acttccttgg aaatagagag	180
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 atgtttttgt gcccaaagtc acttctgtaa tgttcgtttc cgagtttcct ttggggggga 720
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<210> 4797

<211> 842

<212> DNA

<213> Homo sapiens

<400> 4797

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 ttgcagcaac cataggcttt gatggcttct cacaggacag aaaacctgga tcatcccaaa 180
 cctgctctgt gaacctctta cttcatgtat gggtttcctc ccatgctgca cactgtgagg 240
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<210> 4798

<211> 736

<212> DNA

<213> Homo sapiens

<400> 4798

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gagtccggtc tcccggcgaa agtgagcgag gtttgcccg agcgcgcacg aggggaaaat 180
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tgacttctgt gaagcttggg ttgccatgg tangaaatgt ctcatgacac atgcttgtgc 540
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cagaatattc aagtgttct tttgccata actttctctg tgaagatgat caatttgagc 660
atcaaagcca gctgccaagt tttagaggca gaaacattta aatgtgtttc atgcaatcgg 720
ntttggnca cactca 736

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<210> 4799

<211> 713

<212> DNA

<213> Homo sapiens

<400> 4799

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atggtcctgg ttctgaggc tgccagaaag catcttagca atttgtgttt ggaaggcca 180
tgcctgacta ttctaggctg gaggttccta aagagtaaca agaggaagag aaacaagaat 240
ctctgacact tggtgagaat agagcacagt cccatttgtt tgaaaagaga caccaggcag 300

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ccatgtttat gtgccagaaa tgcattccac ctcaaggagg acttaattta tggacccgtg 360
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 gactcccgga gcctcagtga gcctcaatta cttcatatgt aaatgaagta atactatcna 660
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<210> 4800

<211> 738

<212> DNA

<213> Homo sapiens

<400> 4800

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 gactgtggat ggaagaaagt gtgcagtttt tagggatttt acttaggttc gtctttagtt 180
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 aagaatataa ttaaagtgga attaanaggg ggtagaaaa aaggcaattt agaaaantat 660
 tcctggaaaa ctttaattgt ccaaaagggtg aaacangaag attagacaaa ttccctaacc 720
 ctttaagtant ttttttaa 738

<210> 4801

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4801

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aggaataaaa ccacagaaga aaatggagag aaggggactg aaatattcag agcttctgca 60
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cgcctgggca agtacgagca cagcatcagc gtgcggcccc agcagctgtc cgggaggctg 180
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atggtgggaa ccaaactccg gcaagaccaa ggatgccctc ttcacaattc tccatgaccc 600
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aggccacntg atatcagtca ctccagacag natcagggat 700

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<210> 4802

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4802

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acattctgta cacacccttg tgttcaggct gttgaagagg acccatgaca tgtttgtagc 180
tgataatgga aaacctgtgc ctttagatga agagagtcac aaacgaaaaa tggcaatcaa 240
gcttcgtaat gagtatggct ctgtgttgca tatgcctact tcaaaagaaa atcttaaaga 300

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gaagggtcct cagaatgcaa cggattcata tgttcataaa cagtaccctg ccaatcaagg 360
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 tttgacagca gatactaaga tccagagaat gccaaagtga tcagctgcac agtccttagc 480
 ggtggcatta cctttgcaga ccaaggctga tgcaaactgt actgccccta gtggaagtga 540
 ataccgacat cctggggctt ctgaccgtcc acagcctaca gcgatgaatt caattgtcat 600
 ggagactggc aataccaaga actctgcact gatggctaaa aaagccccta caatgccaaa 660
 accccagtgg caccancgt ggaaactcta cagggnatc agtgggcatc ntggctgggt 720
 tc 722

<210> 4803

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4803

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 tcttactgtg ttcgtctctc cctttttcag gggaagcctg agctttgctt agtgatgatg 180
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 gattgccctg ttttcgtagc tctaagaagc agccaaaatc cactccacct cctcccacc 480
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 atattttttt gaacaaaata ntttgcatac ggaagcccgg agctcctgca aaagtgattt 600
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 gagatacaat cttaatgaag ggtggctnga 690

<210> 4804

<211> 494

<212> DNA

<213> Homo sapiens

<400> 4804

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aagtagcggc ggcgcttcaa gatgcgctgc ctgaccacgc ctatgctgct gcgggcccctg   60
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gccacctaca gtgagtacct gggtaggcctc tggcctcagg tgttcctgac tggtcctgct  180
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ggggttgcc aagtgtgancc atgggtacct gtgcctattg ccagtccttg gtgaaggcaa  420
aggctcaagc cccccaccta tcccccttga ntctctttc aagccctgtt gggcagggaa  480
gtncgtctgg gctc                                     494
    
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<210> 4805

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4805

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ggaattttct ggatgatttg tcatattatt tttcttttaa ctctttgggg attccatacc  180
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ttcttgagca tgtttcta atcgttttgcca ttggaatcca tggtcatgg gctcttccat  420
gaattgggta actgtttagg aggaacatct gttggatatg ctatttgtat tcccaccaac  480
    
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atttgaggtc cnacnggcat gctcaaatgg 570

<210> 4806

<211> 543

<212> DNA

<213> Homo sapiens

<400> 4806

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tacaatttgt tttttcagat gaagagactt ccagtgatgt gaaaagtagt tgcagctcca 120
aacctaactt ggatactatg tgtaaaggct tccagagtcc tgataaatct aataactcta 180
cagggacagc aattacatta aattcaaaac tgatttgttt aggcactcct tgtgtcattt 240
caggttccat ttctagtaat acagatgtta gtgaagatag aactatgaaa aaaaatagtg 300
atgtattaaa tctcacacag atgtattcag aaatccctac agttgaaagt gaaactcatc 360
tgggtacaag tgatcctttt tcagccagta ctgatatagt aaagcaaggg cttgtggaaa 420
attatitttg gtctcaaagc agtacgggta tttctgacac atgtgctgtt agctacagca 480
atgcacttag ccctcagaag gaaacttctg aaaaagnat tagtaancct cagcaggaan 540
agg 543

<210> 4807

<211> 637

<212> DNA

<213> Homo sapiens

<400> 4807

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tacaatagtg caaaggtaat tcatttgaga aagtagtctt ttcaacaaat ggtgatgaaa 180

cacttggata tccatgatgca taaaatgaaa cttgatacac attttatgtc tcatacacia 240
 ataagtcattg aacctaaatg taaaacataa aactatacaa cttctagagc aatggctctca 300
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 atataccatg gntatgtaac tatctcttat tagaggaaca gnaacttggg aaagagtgtg 540
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 aacatttaat aanttcccaa tccaattcng ggaaagg 637

<210> 4808

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4808

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 agctataaga acaatgtctt aaaccctgaa gaaatgagac gaagaagaga ggaagagggc 180
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 atagatgaag ttatcaacac tccaagagtg gtggatcggg tcgtggagtt tctgaagagg 480
 aatgagaatt gtacattaca gtttggaaaa ngcccctgcc ctggggctct aaacgaaata 540
 ttgcctcctg ggaacctctc agcggggacc aaaaattgtc attgaagcag gggctgtccc 600
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<210> 4809

<211> 635

<212> DNA

<213> Homo sapiens

<400> 4809

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taagtaattt taaaaaaatg tattggttca agtgacttaa aaaccacact ggttccagga  180
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ggaaacccca aaataggaaa gctaaggaaa ttttgggcct ggttaacctg ggaaaagggg  540
ggaaaattgt ttgcaacctt ttcaagncaa aaggaatgga aaattccaag ttaattncc  600
aaaattttcc aaggcnttcc cccaacaatt aatgg                                     635

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<210> 4810

<211> 657

<212> DNA

<213> Homo sapiens

<400> 4810

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gtcagccttt cctcaccgct actccaggtt cactaatgat ctccctgttg cccaaccaat  180
ggttatttgt tagttcacat ttcagttacc ctctcagaag cctttggcac agctaatac  240
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tactggggct tttttgattc cctgatttgt aacccttgga gcaagcactc ctgtggccat 480
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 aagggggaaa tctctgccaa aaattaggtg ggctaaagga anctgggttt aaaaagaatt 600
 gcacaaaaaa tctcaangta nggtggcaat aatgggggga aacttttttt tttaaaa 657

<210> 4811

<211> 741

<212> DNA

<213> Homo sapiens

<400> 4811

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 tgggtgacggg ggccgaggtg gagggccggg ctgaagagtg gcgggactgg cttcacttcc 180
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 gaattaattt aactgtcctt ttanactgtt tatctatttt tgggtcaagg tcctatgcca 660
 nggaacttta actgcaactt cgaaatgggt gtttacccaa nggtttatgg gttaaccctt 720
 tgaatggccn gttcctggga a 741

<210> 4812

<211> 621

<212> DNA

<213> Homo sapiens

<400> 4812

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aaaagaaaag aaacaagcaa gactggtatt gcaaccccag tcgaatatgc atgaaacagt 60
tgatggctat agaagatatt tcaactcaaat ttaggggttc tttgtggttag aagatcacat 120
tttacctgtg acccaaggat tagtaaccag ggcatacact gatgaacttt ggaacatggc 180
cctctcaaag ataattgctg tccttagagc tcattcatcc tattgcactg atcctgatct 240
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gcttaagaaa tgggctggag ttttcaggga catttttgaa gaagataatt acagcccat 420
ccctgttgtc aatgaagaag aatataaaat tgtcatcagc aaatttccct ttcaagatcc 480
agaccttgaa aagcaagtct tccccccaa aaaaanggae aaatttcccc caatgggtcc 540
tcaaggttcc aagtggcccc tccaanaant tttacccea ttttcaaaag ggtttttaaa 600
aaaagggaag atttttaaaa n 621

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<210> 4813

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4813

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ctctgggtca gtggggaggg agagagagag aattcagagg gaagaaagca gaaaaagatg 120
tcacaaaatt gcctaataca aagttaccat gatgcctgcc tcactctggaa ctgggctccc 180
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gaacaaagct ggacactgca gcctggcatc caacgaacat tttgtcactt tccccagggt 300
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accttagaaa ccacattaac atctttcagc aaaaggaaat tctgcctgtt gatcttttgc 480
tgtgagacaa acttgaaaag ttacagaca ctgcctttct ctgaaaactg cccttacctc 540

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tttggntata attcacttca agatctgttg agtangaaca tcaaaaatgc aaataaaaag 600
 tttcaagtat tatgaaagaa tgcaatanaa ctgcctttta aaaaaatctc aanatggagg 660
 gtggg 665

<210> 4814

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4814

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 gacatcaagg gaaaatgggg tgaggaagat tttgaagaca atcgtcactt atacagattt 360
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 ccagcttgcc gtcttgcca ccgcagacag ctgacagagg ccaatgtana agagatatgg 600
 aagtctatga cattatcata cttacagaaa attcttggcc tggattcctt anaagaagtt 660
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<210> 4815

<211> 548

<212> DNA

<213> Homo sapiens

<400> 4815

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 tactcagaag ccagttcatc agctctttga ttatatttgt ggtgtaagca caggtgccat 180
 attagctttc atgttggggt tgtttcatat gcccttggat gaatgtgagg aactttatcg 240
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 catagtaa atagaggataa caccctaaagc ttttgtgttc agaaactatg gtcattttcc 480
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 ctcatctg 548

<210> 4816

<211> 789

<212> DNA

<213> Homo sapiens

<400> 4816

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 atgatcatct caatagattc agaaaaagca tttgacaaaa tctaaccatcc tttatgatta 180
 aaaccctcag caaaattagc acagaaggaa catatcttaa ggtaataaaa gctaactacg 240
 acaaaccac agccaacatt atgctgaatg gggaaaagtt gaaagcattt tccctgagaa 300
 ttggaacaag acaagacact ttcaccactt ttattcagca tagtactgga agtcctggcc 360
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 ttgctgtttg ctgatgatat gatcatatac ctagaaaacc ctaaggattc atcttgaaag 480
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 aggaatatac ctaacgaagg acatgaaaga cctctacaag gaaaactaca aatcactact 660
 gaaagaaatc acagatgaca caaacaatg ggnaacacat cccatgttca tgaatagggt 720

caatcaatat tgtgaaaatg accatacttt ggtagatttg caaaaagcaa tctacanngt 780
caatgcaat 789

<210> 4817

<211> 795

<212> DNA

<213> Homo sapiens

<400> 4817

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<210> 4818

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4818

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gatttcccta gtcagtgtc tgaagatgtg tcacattata ttataaacaac tacggaaggg	360
gagataggtg agatgatatg aaaaacaaat tttctcactg tcataaaagg ctctaantat	420
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cccaacattt cctacanatc agcgtagtta caaaggggtc aagtctttta aaataagtat	660
ttcctattaa actggatata tatacagtgc ctttttgggg ttgtgangtc agtgggacac	720
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<210> 4819

<211> 786

<212> DNA

<213> Homo sapiens

<400> 4819

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ccctgg 786

<210> 4820

<211> 668

<212> DNA

<213> Homo sapiens

<400> 4820

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cctttggggc attctgcctg ggggggccc cttacnag ggctgcaagc cgggggcttc 660
cggaccat 668

<210> 4821

<211> 706

<212> DNA

<213> Homo sapiens

<400> 4821

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tacttccatt aaaatgataa ctgggtgcac agtgccaact gcaagagtgg tgggtttaca 660
aaggnaacag agcatccagt tagggaacag cgtgncnaca agcctc 706

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<210> 4822

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4822

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acggcgaggc cgggccccca gccccgagcc ccgcgcccgg cccgcccgtc aaggaggagc 180
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acaagctgaa gccgctggtc atcgggcggc tgccggaccc gccagcctg cgccaccaca 480
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<210> 4823

<211> 803

<212> DNA

<213> Homo sapiens

<400> 4823

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<210> 4824

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4824

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ttctcctgtc aattgtttgg tggatggggg tgggggagta attgctaagt ttacaataca 720
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<210> 4825

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4825

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caaatatgaa actggttggg gaatctccat ttttcaata ttattttctt ctttgttttc 240

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<210> 4826

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4826

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 tanaagaatg tacagcctta tgacactgta ntggatgttt ttaaaaattt ccaaagtaga 720
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aatggagaag ctccttaatt tttgggacan nattccggtc gntttttttt taa 833

<210> 4827

<211> 747

<212> DNA

<213> Homo sapiens

<400> 4827

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<210> 4828

<211> 726

<212> DNA

<213> Homo sapiens

<400> 4828

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gcatttcattg cgtacagtta gttgattaga tatttcaggg ttttgcatTT tctanagnca 660
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atttcc 726

<210> 4829

<211> 725

<212> DNA

<213> Homo sapiens

<400> 4829

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gaaat 725

<210> 4830

<211> 580

<212> DNA

<213> Homo sapiens

<400> 4830

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<210> 4831

<211> 837

<212> DNA

<213> Homo sapiens

<400> 4831

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<210> 4832

<211> 753

<212> DNA

<213> Homo sapiens

<400> 4832

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<210> 4833

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4833

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 agaangtcaa aatccttaat at 742

<210> 4834

<211> 555

<212> DNA

<213> Homo sapiens

<400> 4834

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cactgtcata tgctaccttt cctatctctt ccctcatcat cttgttgcgg gcatgaggag 360
gtggtgatgt cagaagaaat ggntcgagct cagaagataa aagataacta gggtatgctg 420
atcctctttt aaaaacccaa gatacaatca aaatcccaga tgctggncctc tattcccatg 480
aaaaagtgtc catgacatat tganaanacc tacttacaaa gtggcatata ttgcaattta 540
ttttaattaa aagat 555
```

<210> 4835

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4835

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gtggacaagt tccggcagtt catgcagaat ttcaggcctg ctgatgaagt ttttagatgt 180
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tcctactgtc taattataaa tcttgaaaga tcaagctgat tttttatttc ttttttttg 360
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aaccttcacc tcccaggctc agggagatgt gcattgagca ggatgggaga gtccatctca 480
ctgttgttta ctttgggaaa gaagaaataa atgaagtcaa aggagtactt gaaaacactt 540
ccaaagctgc caacttcagg aactttacct tcattccaact gaatggagaa tttctcggg 600
gaaanggaen tgatgttgga ncccgcttct gg 632
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<210> 4836

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4836

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aggacggcgg gaagaggagt gcggaacccg cgggaggatg tgcacagagg gccagaggagg 60
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ttaaactgca gaggcgaaga gatgcctcag tcaagtcagc caaaaacacg cgggtcatcc 180
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tggatctact ggacctgaat ccagaatta ttgctgcaat taagaaagcc aaactgaaat 420
cggtaaagga ggttttacac ttttctggac cagacttgaa gagactgacc aacctctcca 480
gccccgaggt ctggcacttg ctgagaacgg cctccttaca cttgcgggga agcagcatcc 540
ttacagcact gcagctgcac cagcagaagg agcggttccc cacgcagcac cagcgctga 600
gcctgggctg cccgggtctg gacgcgtgc tccgcgtgg cctgcccctg gacgggatca 660
ctgagcctgg gccggnca anctccggaa gggaaagacc caaactgggg gctggaa 717

```

<210> 4837

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4837

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ttttcacatt actctagtcc ccaagaactg tgggccacca gatgacttca gatgtcccaa 60
tccgacaaag cagatctgga cagtgaatga agctctaatt cagaaatggc tgagctatcc 120
ttctggaagg tttcctgtgg agatagccaa tgagatagat ggaacgtttt cttcctctgg 180

```

ttgcctaaat ggaagttttt tagctgttag caatgatgat cactatagaa caggtaccag 240
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 tcatccgcag atatctcagc aggtggcagc tagtttgga aagaatctta ttcctaaact 360
 gactagctcc ttacctgatg ttgaagcatt gaggttttat cttactctac cagaatgtcc 420
 cctgatgagt gattccaaca atttcacanc aatagcaatt ccctttggta cagctcttgt 480
 gaacctagaa aaggcaccac tgaaagtact tgaaaactgg tggtcagtac ttgaacctcc 540
 actattcctc aagatagtag aactttttta ggaagttgtg gtacatcttt tgaaactcta 600
 caagatcggt attccccctt ctgaaagaag aattttcaac agttttcttc atactggcat 660
 taaaggnttt agaaatacta catagggtta atgggaaaat ggggacagnt tatncagtaa 720
 gg 722

<210> 4838

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4838

agattttttt aatgccgaga aaagtccatg ccacagaagt tattgtgtat gtctctaggg 60
 agctttaaga atttcacgtt tgaactttac agctgtttac caattaaatg gcaagctgga 120
 aaaatacatt ttgagagggg tagaaagaat aagaatataa ttaaaagtat gctaacaaaa 180
 taagcagtac atattttttt agaaaatgca gtttaggccca ggcacggtag ctcgtgcctg 240
 taatcccagc actttgggag gccgaggcag gtggatcacc tgaggtcagg agtttgagac 300
 cagcctggac aacatggtga aaccccgctc ctactaaaaa tacaaaaaat tagccaacga 360
 tggatgatgcc tgtctgtaat cccagctact ctggaggctg aggcaggaga atcgcttgaa 420
 ccggggaggc agaggttgta gtgagccaag attgcaccac tgcactccag cctgggcaac 480
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 atttcttttc cccttaaagt ggctgaatcc attggagatg tgatttattt tgcagattca 600
 ccaattccaa acttcangaa tattcaagcg ggaagtcatg tgtaagtgac agcctttgca 660
 aagaananac tgtggctggg gtgg 684

<210> 4839

<211> 826

<212> DNA

<213> Homo sapiens

<400> 4839

```

aaggaagaca gcaagagagg aacagatgga caaaagaatt ataagactaa caca'aaccaa 60
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aggcggatca cctgaggtcg ggagtttgat gccagccagg ccagcatggt gaaaccccat 180
ctctactaaa aatacaaaaa ttagccagac gtgctcactt gaacccatga ggcagaggtt 240
gcagtgagct gagatcgtgc caccgcgctc cagcctgggc gacagagcaa gactctgtct 300
caaaaaaaca aaagcaaaaa caaaaaacaa taaaatggct gtagtaaatt cttccctata 360
aataattact ttaa'atgtaa attgattaaa ccccctaate aaaagatata gaatggctga 420
gtggataaaa aaacaagact acatgctgtc tataagaaac tcactttaga t'taaggaca 480
cacatagagc aatgtgtgtc cttaaacata ttccatgcaa ctggtaaacg agtgcagaag 540
tggttatact tggatcagac aaaatagagt taaaatttaa aactgtcata agagacaagg 600
aaggacatta tataatgata aaacgggcaa ttcactagga agacataaca attataaata 660
ttcactcaac atcagaacac ctaa'at'atgt aaagcaa'atg ctgatagaac taaagagaga 720
aaagcaatac gattaat'atc tgagcctctg gctactttgt aaaaaaggaa aaaaaaagca 780
ttacaattac agttacaagc ctcaatancc cactttcaan nagggg 826

```

<210> 4840

<211> 681

<212> DNA

<213> Homo sapiens

<400> 4840

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aaaaaggcgt cggccctctg gcaagatggc tgctgcggag gcgttggagc gcggaaatct 60

```

ggaaccggga tggcgacgtc tacactgagt cggaggcgaa ggagcttact ccacgggaac 120
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 acaacagtgt tgttgtgagc ctggctgtct gcttggaacc agaggtttcg tctgccaggg 240
 tttttggttg tatttaggat ttcagggaag agtgtccaag ctttcagtgt tggagcaggt 300
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 cctgcggcgcg agtgggagcg agcccaagcg cactgagcgc gtggagcant tcctgaccat 540
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 cgtcctgccc cgccacagac gccgagacag cctccnaagg ggcaacnttg gnaaagcgct 660
 tctgaagaac caaaaagcgg g 681

<210> 4841

<211> 570

<212> DNA

<213> Homo sapiens

<400> 4841

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 aatgaccaag agtttcttca atgcccagtt tggaagcctg ttccgcacag accagaaccc 180
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 ggccaagtag ccaagggcaa aaactagaaa ctgtaactgc ccctgattgg gcaggcatga 420
 tggggttgac ttcatgtggg tctgagtgtt gcttttgaa aagatacaga taagcctttt 480
 gatatttatt ttgcacctta cggagaataa ntctcccaat gantaagaca ggagctagca 540
 gcccancct ccagccttc ccccatgca 570

<210> 4842

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4842

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ataggttaagt tctccagtgg tgattactga gattttgggg caccatcac ccgagcagtg   60
tacactgtac ccaatgtgca gtcttttata cctcgccac tccccaccct tccccctgag  120
tccccaaagt ccaactgtatc attcttatgc cttcgcatgc tcatagctga gctcccactt  180
atatgtgaga atatacattt ggtttttcat ccctgagtta cttcacttag aataatgaaa  240
tccccataca cctaggttca gggctcctcc ccaggaaact tctgaggttt ggggagtcct  300
aggagagaag ttaggaaact ctggcctcca tcccctccct gtagcagcca aagttcttag  360
ggatttagag gcgattttct tttgtccttt ctaagaattg acatcattgg tctcatctag  420
acttgcttca agccctactg atggaccttt gacagagtct tcccccaat ctgactcttc  480
tccatttttc caagaaaagg gattagatag gaaagtcaca taccagggg cctgcagcct  540
gtgacttcag aactgggaag tctaaaccct acagcccctt cttcttctga gccacctact  600
attgttgcag aattgtgtga ctgagtcctg tctccttaaa acgaccataa actcttgagt  660
gcaaaggatt gtattagtca agagtaaagc tatgctgcta nnaaaaaata gtcctacat  720
gcaaagggtc aatacagtag atgtttattt cccggcttan aa                        762

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<210> 4843

<211> 660

<212> DNA

<213> Homo sapiens

<400> 4843

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aaaaatcaga ataagaagta cctgacatac tttctacatc tgtagttgcg gaagacattt   60
taataggctct tctcatagcc tttctttgct aaggacattg tgactctcca gagagcaaca  120
gtgatggctc tagaatgtct aggaaaaaaga agggcttaat gtcaggagtc tgcttggggc  180

```

acacaacact agaagatgtc cttctgcaca ttgtttcata tcgagtatgg aacccttcag 240
 atcaaagctt accaataaat tcagtatgta gaacagatta acgtagttga aatgaggaag 300
 aatgagagtt atctcaacca gccagcacc cctatcccca ttcccacact ttcctcatg 360
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 ccagcctggc caacatggcg aaaccccatc ttactaaaa atacgaaaat tagccaggta 540
 ttagaattat ttctgaatta tcagtctctc atttgctgtt tggagaagca gaaaaggcan 600
 aaggggtctt tggccatctt ctgctggagc ttccanggan gatgtgtctc caagagacca 660

<210> 4844

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4844

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 actcttggaa gaatttagtt tagttacata ctttttttaa aagataggct ttcattgctc 180
 tcagttcctt tagtttttaa aaagtttcca atgtgtaaag aaacttccac ctgttaatct 240
 taagaattgg tagctatttg ttaaactgat ggcatatgaa ggcaagagtc tatgagtcgt 300
 ttctaaagta atagatcttt gaaaatttta aaaagtgaag tttgtcaata acagagttaa 360
 gagctgaatt cttttgtcta aaacttatcg aaattgatgc ttgtactcta ctggctccct 420
 gatgatagta gaaaagcact agtaatgtac caaatgaaac tggttgtgta ccagatgatt 480
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 tttcaagaac atagcaaaag gctgatttta ttctacttca ctttttagaa gtgcattttc 600
 tcaagttaca gggcatttca cttccctttt acatgaagag attttctttt gaatattttt 660
 cctctccttt ggtagcagtg atagacatga ctaaataana tatgggtcct tttggtttgc 720
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<210> 4845

<211> 622

<212> DNA

<213> Homo sapiens

<400> 4845

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gaagtggcgt acggcatgcg ccggtggcgt gatggagcgg cagcagcagc agcaacagca   60
actgcgaaac ctgcgtgact tcctgttggt ctacaatcgg atgacagaac tctgcttcca  120
gcgctgtgtg cccagcttgc accaccgagc tctggacgct gaggaggagg cctgtctgca  180
cagctgtgct gggaagctga tccattccaa ccaccgcctc atggccgctt acgtgcagct  240
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cgttgctgct gaacagcctg gggctctctcc atcaggcagc tagccatacc caaccccagg  360
aaggaaggcc ttggatggac cctcagattg aaggaccggt tggaccttgg ggttggtgaa  420
tcctaaacag agagaattcg aggttgcctg aaaagctggg tgtccttgct ccttttcctg  480
gagccaatat acccagtttt tactcagttt gatntatatt ctgggcaagg aagctttgcc  540
tactttattg gcacaatccg ttgttctgtc gtttagtgca tatcngctgg cttcagccct  600
ggcagctgan gaaattgntt tc                                           622

```

<210> 4846

<211> 476

<212> DNA

<213> Homo sapiens

<400> 4846

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tccaaagaat gttgctacag agacacaatt gaaagggtgt cagcattctc aagctgctcc   60
agtgaaatgg attttccaag ataatctaca gccttttacg ccatctcttg ttctgttaa  120
gtcttcaa atgtggctt caaagatttt aaaaactttt gtagatagga aaaatttggg  180
agataatact ataaatatgc caccattgag taccatcgat cctagtggga cgcgatccaa  240
aaatatgcct attaaagata atgctttggt tatgtttaat gggaaagtct atctgttggc  300

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taanaagggg acagatgttc tgccatcaca aattgaccaa cagaattctg tttctcctga 360
tactccagta agaaaagaca cgttacagac agtgagtcca agtccagtca canaaatata 420
caganaggtt gtaaataattg ttttggctaa angtaaactt tcccagatgg agacaa 476

<210> 4847

<211> 630

<212> DNA

<213> Homo sapiens

<400> 4847

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taaggggaat ggccaggcgc ggtggctcat gcctgtaatc ctagcacttt gagaggccaa 120
gataggcaga tcacgaggtc aggagtcca aaccagcctg gccaacaggg cgaaactcca 180
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tcccagctag ttgggaggct gaggcaggag aatcatttga acctgagagg aagaggttgc 300
aatgagccaa gatcatgcca ttgcactcca gcctgggcga caagagcaag actctgtctc 360
aaaaaaaaag aagggggata aagaaaaaca ctggaaaaag gatgacctgt agttaagtgt 420
tggcataata caatgaaaga cttaacgttt ctagacactc tagttgaatt tggtcctttg 480
agactgtcgt gggctcattt cctcagcgtg ttgatttagt gactcctgaa ggagcagacc 540
cttggtttgg ncctcacttt tccataagac gttcaaatag atttaangcc tgagggtcct 600
gtcatctaaa tccattcagt anaccgtaca 630

<210> 4848

<211> 642

<212> DNA

<213> Homo sapiens

<400> 4848

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 gcaggagaat cacgtgaacc caggaggcag aagttgcagc gtgccgagat agcgccactg 240
 cataccagcc tgggcgacag tacgagactc cgtctcaaaa aaaaaaaaaa aaaaaaaaaa 300
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 ataccagaga gggacagggg tcaaacagg aaagtcacat tgaactggaa ttggtaagag 420
 gtaggaaaat ctttaagtgtt ctgttttcct gattaatcat caggggccac attttgaaaa 480
 atgataataa taactatatac aagatgacac ttcaaataaa aatataaagc aggacgtgaa 540
 acactgtcct cagcaaaaaa cctcaacaat tggggggaga aaaaaanaac accaanggt 600
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<210> 4849

<211> 571

<212> DNA

<213> Homo sapiens

<400> 4849

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 atgtcttttag tacaatatat gaattgtata tggaaaaaca tgctttttga aagtcaccacc 120
 aaaaagggtt ctttatggta tcattaaata taatttcagt ttttatatgt atacatcatc 180
 cctgtctctc tttccaggcc gggcatttat atatgtatgg tcagtatatt ttctattatt 240
 ggcacttggc atctccttcc cctgtctcca gaatggcttt ttctgataaa actcacaagc 300
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 agcatacaga tatttaactc tgaggtatgt gtccacaaag ctgcttttgt catttcacta 480
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<210> 4850

<211> 576

<212> DNA

<213> Homo sapiens

<400> 4850

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aaagatttgg tagaaatgtg ccgtggtgtg caacatccct tgaggggtct gtttcttcga 60
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gaaacaactg gtgacatcag tgattccatg gattttgtac tgctcaactt tgcagaaatg 180
aacaagctct ggggtgcgaat gcagcatcag ggacatagcc gagatagaga aaaaagagaa 240
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gaaggtgtaa atgtggaacg ttacaaacag attgttttga ctggcatatt ggagcaagtt 360
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cctgatgaat ttcacctcca gactttgaat cttttcttc gggcctgtgc tgagttacac 480
cagaatgtaa aatggtgaag aacataanca ttgcttttaa ttgatagatt accttaattt 540
gcncaccctt aaaaatggnc ctggaatccc agcggg 576

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<210> 4851

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4851

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ttatgcagca ggcattaagc agtcacactg cttttaccaa acacagcgag gaacttggaa 180
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aacagactca gctgcaagtg aaaactctgc agtgcttcca gactaaacag aagcagacca 360
tccacctgca ggcagaccag ctccagcaca aactcccgca aatgccccag ctttccatca 420

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ggcatcaaaa actcaccct ctccagcaag aacaagcaca gccaagcca gatgtncagc 480
 acacacagca tcccatggtg gccaaagaca ggcagcttcc taccttaatg gcacagcccc 540
 cgcaaactgt agtacaggtg cttgcagtga aaaaccacgc agcaagctcc ctaaaactgg 600
 cagcagggtc cggaaccaa ccaaaaaatc tacgntgtaa accccaaaac cccccangag 660
 ccaaattgtc gctcccangc ttcttcaaga ggaaacaa 698

<210> 4852

<211> 761

<212> DNA

<213> Homo sapiens

<400> 4852

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 gatcaatctt accagagggc cctcagggct gggcttcaac atcgctcggtg ggacagatca 180
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 ctctctctgc atagccagat ttgaagtgc tgataccac cccaaacctt gctgttcaca 660
 gtctccaatt ctcatattc taatggggaa aagttaaggt atttgtttga aaggaaaact 720
 gaaagaaaag acntggntta naacaaatgg aggagttat a 761

<210> 4853

<211> 830

<212> DNA

<213> Homo sapiens

<400> 4853

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caactaatgg gaaaaataac caagctagca tcataatgac agaatcaaat tcacgcataa 60
caatattaac cttaaagtga aacagggttaa atgccccaat taaaagacac tgactggcaa 120
attggataga gagtcaagac ccatcggtgt gctgtattca ggagactcat ctcacgtcca 180
aagacacaca taggctcaaa ataaagggat ggaggaatat ttatcaagca aatggaaagc 240
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ccaacaaaga tcaaaaagac aaaaaagggc attacataat ggtaaaggga tcaatgcaac 360
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aaacagtcctc tcagaccaca gtgcantcaa gttagngttc aagattaaag aaacttgccc 780
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<210> 4854

<211> 676

<212> DNA

<213> Homo sapiens

<400> 4854

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tcttgccacc tatcaaagaa acatattttt tagagtcata aaattaaata ctgtgaaacg 180
aaaagatgca aaggaaataa attgaaaatt actaacaaaa caaaaaaccc ctgaatgaat 240
aaaacatgct atactttggc aaatatagac tatagtctgat attcaggtaa gcagacaacc 300

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ctgttcctta tgatgacccg aacaataaga ggccaatcac tgcccctgtc tatgtttgct 360
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 taataagaac ttgtcctata cttcctatta tttcactgtg ggaagcagtg ttttgtttgt 480
 ttgtttgttt gttttcctat atatggcagt agcctctgta gtattctaaa acaaaggggg 540
 gtgcgggggg accctgtctg tgggtgtaagt aaatgtgtga ttttaattctg tgcattgcat 600
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 tagttttacga agcacg 676

<210> 4855

<211> 763

<212> DNA

<213> Homo sapiens

<400> 4855

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 tcaaaagcgt acaatttatt tanatatcac aaacacacta aatataacaa acaataacta 600
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<210> 4856

<211> 748

<212> DNA

<213> Homo sapiens

<400> 4856

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ttgctgctga acccctagga cccatcgta gagacctgca ggactccttt cctcatccca 180
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atctgctggt gggaaggcct aaagaactgg aaaagcccac tctcttgga ccaccacacc 600
tgtttaaaga acctaagcac catttaaagc cactgggaaa tttgttgtcc aantgggttg 660
tgggtgaata aaggagggca aaatgggatg attttcatct ccaattaacc ctgctgtcct 720
ctgggctaan gtttggtggg gaangtta 748

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<210> 4857

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4857

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gagttcgcca gtggtccagg agccgctttt ttccactcgg gaagacttca gagaagtctc 60
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agcggcctga ccaaggcgct tgcctcacgg acgctcgCgc ctcaggtgtg ttcatctttt 180
gctacgggcc ctagacaata cgatggaacg ttctatgaat ttcgtactta ttaccttaa 240

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ccttcaaata tgaatgcgtt catggaaaat cttagaata acattcatct tcggacctct 300
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 catatttggg agtatgataa ttttcctcat cgagctgaag ttcggaaagc cttagccaac 420
 tgtaaggaat ggcaagaaca atctatcatt ccaaatttgg ctgcattga taaacaagag 480
 acggaaatta cttacctgat accatgggtc aaattagaaa agcctccaaa agaaggagtc 540
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 gaaaaganca attaatgcca tgtcaattta ngntacacaa aagtagttgg ggttttccac 660
 acaggatatt ggggg 675

<210> 4858

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4858

tctctgaatg ctgagttctg ccttaaaaca gcacgggtca tgctagatga aagggatctc 60
 tgttttatac tctcatctct tcgctattgc cgtgggatga aagacagcag aaggaaggcg 120
 tctaagttca gaacaaagtg agcaagacca gctggctgct gttggtagca gaggcacagc 180
 cagcctgtca tggcactggg gggccgaggt gagctgtgcc ccctcctcct gggcttgtga 240
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 atggggtttc accatgttgg caggctggtc tcgaactctg acctcaagtg atctgcctgc 480
 ctccagctct gaaagtgtg gattgcangc gtgagccacc gcaccaggcc taaacagatt 540
 tctttacaat ctancacat gaacagcaag cattancatt gctccgtcca accaacaacc 600
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<210> 4859

<211> 781

<212> DNA

<213> Homo sapiens

<400> 4859

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aattcataca ggagagaagt catatatatg cagtgattgt ggaaaaggct tcatcaagaa   60
gtctcggtc  attaatcatc agagagttca tacaggagag aaaccacatg gatgcagcct  120
gtgtgggaag gccttctcca aaaggtccag gctcactgaa caccagagaa ctcatacagg  180
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tgcacatcag aaagctcaca caggagagaa gtcatatata tgccgtgatt gtggaaaagg  300
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tactcacact ggagagaaac cctatgaatg caatgaatgt gggaaaggct tcagccagaa  480
gacatgttta atatcccatc agagatttca cacaggaaag acaccctttg tatgtactga  540
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cagacatcgg gggaactcat acagggggaa agaccgttat ggnttgctct gattgttggg  720
gaaagcttcc ntcccanttg tcatgccttg gtttaaccaa aagggaaatg cctgcttgca  780
a                                                                    781

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<210> 4860

<211> 715

<212> DNA

<213> Homo sapiens

<400> 4860

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gaaaggacgc gccggagccg ggtgagtggc cccgcaactg cccctgcccc tgattcttcc   60
ttgcctcgcc gcgaaccccc gcgcccgcgc cgacccgcc a ctgcctctgc ccttttccag  120
ataacagaaa gtaacgtgaa ggaattcagg tgactcagac atggaggaga gaagacctca  180
tctggatgcc aggcccagga attcccatac caaccacaga ggccctgtgg atggagagtt  240

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accaccaaga gctagaaatc aggccaataa cccaccagcc aatgctctcc gaggaggagc 300
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 tggcaaccag gactgtagga accgcagacc accatgggcc aatgacaact tccagcantg 540
 gcggactccc caccaagaag cctacagaac agccacaagc aggcgaagaa actgggctac 600
 aagttcttag aaagtcttct gcagaaaaga cccttctgan gtggtcatca cacttgccac 660
 aaagtttagg gctgaaagag ctcctttctc antcttccat tgaaatctaa ctcc 715

<210> 4861

<211> 730

<212> DNA

<213> Homo sapiens

<400> 4861

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 gcaccaacag ccgggtcacg gtaggagaat caactattac agcatccggc aaacaactgg 180
 aattgaccag aaatgccttc agaattaggt ctttttgaat cataagcaca gccatttaaa 240
 aaaaattttt taacctagct ttttgagtat tttcaacatt cgttgtagca tctcacactg 300
 aaaaaataaa tagtgagatc tggaatgtat atagaagaaa agaaaaatcc attctgtttg 360
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 attggcatta gtctcaagga ttgagtttct agtagaggct ggtctttcag acctggcttt 540
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 tcttttggat ttagtagttg accttctaac taagactcat ttctctacag tgaaaaagag 660
 aaaaacgttt taatgtcacc tcaaagaaat gcagagtga ggggtgantga aattaanttg 720
 aaggtatcan 730

<210> 4862

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4862

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agacaggagc agtcattccc ttgtagggac aactagaaga aattttatga ataagcatca 60
gaagccagtg ctaacaggcc agcggttcaa aactcggaag agggatgaaa aaganaaatt 120
cgaaccacac gtcttcaggg atacacttgt ccaggggctt aatgaggctg gtgatgacct 180
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aacagagcaa gacaaagttg gcgatgctgt cggggattct gctgggcaat ggnaccctgc 540
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tgccaggggc tctttttggg gtctctccat actcattcct tcatttaaga gaatatcttt 720
gtatgggggt gtanattgcc ctttcaaatt agtaaaaggg agngggncct gttaatttgt 780
agggaaaagg                                     790
    
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<210> 4863

<211> 600

<212> DNA

<213> Homo sapiens

<400> 4863

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gcttcccgtc cgctgtcctc tgctgccagt cccctgcccc gggcaaagcc catctgggtc 60
gccgagcagg ccggagctat tgggagtggc ggatcctccc accccagccg gatctggggc 120
    
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atggccgagc ctggagaggg actgccagag gaggtgctgg cactcatctt ccgccacctg 180
 tccctgagag accgtgctgc cgccgccagg gtctgcaggg cctgggccgc cgctgctacc 240
 tgcagcgccg tgtggcacga cacaaaaatc agttgcgaat gtgagctgga aggcattgctg 300
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 ccggggctgc gaggcctgcg cctggagtgc cgcgagagaa aaccgctctt cgacgcgggc 480
 cgcgacgtcc tggaggctgt gcacgctgta tgcggggcgg ccaaccagct acgccaactc 540
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<210> 4864

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4864

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 acagagcgag actccattta aaaaaaaaaa caccagggca tctgtaagcc actttgggag 120
 tcaaaagaat gtagagctgg gctggactcc ttagaagaaa gttaagtctt gactgtggga 180
 ggaagtgcct gcacccccac atccagacag cccgtcactc ctgctgccga agactgactt 240
 gctgattcgg gctctgcctc catagtgggg gcacagagcc agggagagtg cccacaggcc 300
 cagggatcct ggggtgtggga ccaggagaaa tgcccacagg ccccagggcc tttttgagcc 360
 cagggcgtc tctgcacagg cctgctacaa cttcatccga agcatggccg cctacagcct 420
 cctgctgttc ctgctgcaga tcaaggacag acacaacggc aacattatgc tggacaagaa 480
 gggccataatc atccacatcg gtcagccagc cacagcgcca cctcctctc ccttcacccc 540
 ggcacccagg ggtggatagg gatccccacc ccacagagag gagaatgccc aagaccaccc 600
 tgccaggagt gtcanggtcc aactctgagg tccgaactgt cggncaccaa nctgttctgc 660
 tgtaaaaggt gcctgggccc cggg 684

<210> 4865

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4865

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tgaaaaccag cttgtagtta gggcccgag cgcatgcat agactcggcg actcaggaat   60
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cctccagtgc cccagtgact gggcgtgagt ccggaagtgg ccacaacca gcctggaccg  180
tcgcttataa agctgtgtaa acctgtataa gctcaggcgt tgacagctgg aaggcagctg  240
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ccttctcaat cttggaacag cacccttc ttaagtccc ccaggaccg acagcctgag  360
ccagatttct actgtgtcaa gtggatccct tggaaaggag aacagacacc catcatcacc  420
cagagcacta acggcccttg ccctctcctt gccatcatga acatcctctt tcttcagtgg  480
aagggtgaagc tcccccgca gaaggaagtg atcacatcgg atgagctcat ggcccatctt  540
ggaaactgcc tcctgtccat caagccccag gagaagtcag agggacttca gcttaatttt  600
cagcagaatg tggatgatgc aatgacagtg ctgcctaaac tggncacaag tctggatgtc  660
aatgtgcgat tcacaagcgt ctctgatttt gggatataca ccgaggtgca atgtccnttg  720
accctgctan ggaatacctc cgttacaaag gggntgggct tgtttgattc caaaaaa   777
    
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<210> 4866

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4866

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gtgtcactcg gcccgtcgg cgcgccctt cccagccgcc cttccgtacc ggtctcggg   60
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ctccgagtcg cccctgcgga ctggtctcgc acagtgcctg ggcaccgggc gccagacaga  180
cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgtc cggggccacg  240
    
```

agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 300
 cccgagaccg caccaccgc ctctgggccc cagacagtcc aaacaggagc ttacagaaa 360
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 tatcatctgg gaanaatttt gggacattac ttaatgggtt catgggacac caactgctaa 600
 agtctggctg aatgncaagt gcatgatgan cttgcagggg tcatacagat gcggtgtggg 660
 cgggtnaaga tcttacctga aacaagggtc taaatgttt 699

<210> 4867

<211> 723

<212> DNA

<213> Homo sapiens

<400> 4867

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 atgtcgccat cccctattcg gagctacaga cctcgcagct gaactcttaa aaagaacctc 120
 gcttcttctt caccgtgctc cagctccaca caccgtactg agcctcgcca gccaccgtac 180
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 gaaagctctc gtctaaggc aactttgctg acctgggcct ggagccccgt gtgctgcacg 660
 cactnaaagg gaaggnttgc gccttgaang tcgtttaagc ccaaaaaccg gtggcaattc 720
 caa 723

<210> 4868

<211> 698

<212> DNA

<213> Homo sapiens

<400> 4868

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tacgttggaa tcaccttggc atcagctggg gatctttaaa ggtgtttctg cctggctccc   180
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aattaactgt tgaaaataat gtttgattga gttaccatgg gcatgctaaa ttatgtttat   480
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agtgttggna ttcttaaaag tactagaaat cttgaaacca agttatgttt ttaaatatgt   600
tttgaatttg ataactta ataatgtaat taattaaagt catgtttaac actgggaana   660
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<210> 4869

<211> 777

<212> DNA

<213> Homo sapiens

<400> 4869

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attaatctgg ccgtgccatg catctactcc atgttcaggc ttgtggagag gtacgagatg    60
ccacggcacg aagtctacgt tctcctgacg cgaaacatct ttttgaaaat atcaatcatt   120
ggcattcttt gttactattg gctcaacacc gtggccctgt ctggtgaaga gtgttgggaa   180
accctcattg gccaggacat ctaccggctc cttctgatgg attttgtgtt ctctttagtc   240

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aattccttcc tgggggagtt tctgaggaga atcattggga tgcaactgat cacaagtctt 300
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 gtgtggattg gcatcttctt ctgccccctg ctgcccttta tccaaatgat tatgcttttc 420
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 tggcgggcct cacagatgat gactttcttc atcttcttgc tctttttccc atccttcacc 540
 ggggtcttgt gcaccctggg ccataccat ctggagattg aagccttcag ctgactgttg 600
 cccttttcga ggtctgcctc tcttcattca ctccatctac aagctggntc gacaccctaa 660
 gtacaagggc ctgggctacc tgtggggttg tttggatcta accggaacc tcaatgggaa 720
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<210> 4870

<211> 526

<212> DNA

<213> Homo sapiens

<400> 4870

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 caggccgcct ttcgagcgct ttgtgtccat gaaccgcggn atcaacaatg gtagcgacct 180
 gcccaggagac cagctgcgga acctcttcga cagcatcaag agtgagccat tctccatccc 240
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 ctgcctctac tacttcgagt tcaccactga caaggagcca cggggaatta tacctcttga 420
 gaacctctcg gtgcanaang tggatgaccc caagaagcca ttctgcctgg gagctctaca 480
 accctagctg ccgaggccag aaaatcaang cctgcaagac cgatgg 526

<210> 4871

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4871

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cagcagattt aggcattgga gatctaattc ctgtggatgt taaccatttg aacatttgta 60
agccaaagaa aaaggatgct tttttgtacc agcgtacttt acaattcatt cgtgaagctt 120
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gcaagaaact tgggtttctg tttcttcttt taagctctat gcaatcatgc aaacatagtg 240
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atttgcctgta catTTTTTaaa gtttgagttt ttagctcagt tctacctttt atctgacaca 660
ttattactaa gtggttaact ttgttagact taantggcat gtccggggtc aagttccctt 720
gnatcnaatt ttccgta 737
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<210> 4872

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4872

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aacatttcct gcgcagctaa agcaagtctt accagtagga aaccggaact tgctaggact 180
aagaaacttg aggctaggct gaccccatgg ttgttatgat tagaaatccg aggccactgg 240
aaaccgggag ctgctgacca acgagtcaca gggtaacttc gccttcgcat ggggaaacgg 300
gctgggtgcag tgggtgcac ttggctcagt gcagcctcga cttcctggga tccagcgatc 360
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ctcccgcttc agcctctaga gtanccgaga ccacaggtca cccctcgctg ccaggctctc 420
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 cttgaaactc tcggtctaag gttccttagg agcgtaaaag gcacagcggtt ttctgatcgc 540
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 a 661

<210> 4873

<211> 648

<212> DNA.

<213> Homo sapiens

<400> 4873

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 atgcaataga tacaggaaga tttccacggt tgctcactcg gattcttcaa aaacttcacc 180
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 tgtatcacia tgtgaagcca gcagctttgc agcagcaatt agagaacatt catcttagac 360
 aagacaaagc tgaagcattt gtcaatactt ggtcttctat ggggtcaagaa acagttgaaa 420
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 ttcagatggc tcactctgct caagcaaaaac taaaatctcc tcaagctgtg ttacaactcg 540
 gagtgaacaa tgaagattca aagagcctgg agaaaagttc tgtggnattc agtcacaagg 600
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<210> 4874

<211> 490

<212> DNA

<213> Homo sapiens

<400> 4874

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agaagagcgt ccggcgccctc cgggagaagt ttcattggaa ggtatcctcc aagaaggcgg 180
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aagccaacct acgcatgttt caacgtgccc aggacgacct tatccctgct gtggaccggc 420
agtttgctg ctctcctgc gaccagctct ggtggcgccg cgtgnccan cggaangagg 480
tatcccgggtg 490
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<210> 4875

<211> 760

<212> DNA

<213> Homo sapiens

<400> 4875

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taaaataaaa taaaataaaa ataaaagttt gcagtttaca caatcaatcc tggaagcatt 60
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ctgtcataat gtatccagaa attcaattag agagagtgtg tgtttctggg ccaacagagg 180
caaggttagg gggcagaggt aatataagtg agctggccca agccatgcaa cttagcctca 240
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gtccagatgt gctctgtgcg tgcattggat ggcttccaat aaagtcaaat gacacagtca 360
cgtgtcagtt taggtcctct aggaaacaga caccagagag aatgagaagt gcaagtgaca 420
tattggggga tgcctatgaa agacaaaggg gagaggagc aggatgaggt gggaaggctt 480
cagactgtga cacaggtgtg ccacctgtga aaagtgaagg ggaaagaagc agcattctca 540
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ctaaagggtg cccattanag aagtctcggg cctagtgtcc cagccacatg gagtgtccca 660
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gagagcgcan ctttgggtg agctctgagg gancaagtcc tccttgaggg tctctgaaag 720
gaagatntaa gctgtgcact tcttgggctg ccttaattta 760

<210> 4876

<211> 767

<212> DNA

<213> Homo sapiens

<400> 4876

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cattttaaaa tcctgtgcgt ttatcttcat ttgctgggc agaaagccaa agtactggac 180
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aaccaaggag tcaagagacg ccaaagcaca gttggccctc tcctcatcgg ccaatcagag 300
caaggaagtg cctgaaaacc caaactatgc tctcaaagt actcttgtgg gacacacgga 360
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taggctaatac ataatttggg gagcatatga tggaaaatat gagaaaacac tctatgggtca 480
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agatgataaa actctaaaat tatgggatgt gagatctgga aaatgtttga aaacactgaa 600
ggggcacaag taattatgtc ttttgttgta acttcaatcc gccatccaac cttataatct 660
cgggatcttt tgatgaagac tgnaaaata tgggangtga aaacaggaaa gtgtctcaag 720
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<210> 4877

<211> 785

<212> DNA

<213> Homo sapiens

<400> 4877

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 atcactttga gctcaggagt ttgagaccag cctgggcaac atggggagac ccttcctcta 180
 ctaaaaacac aaaaattaat caggcatggt ggctaacacc tgtaatccca gctactcagc 240
 tggctgagtc tgaaggatca cttgagcctg ggaggcagag gttgcagtga gcggagactg 300
 caccaccgca ctccagcctg ggagacagag tgagaccctg tctccaatat atatatatat 360
 taaataaatg gttaagagct aaccaaagca tatagaggaa tagctttata gcaaataatg 420
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 aggctaatgc ctgtaatccc agcatttttg gaggccaagg tgggagaatt ccttgagccc 540
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 attaaaaatc agccaagtgc agtggtgctt gcccaaagtc ctagctactc angaggctga 660
 ggcaagagga cccagcatga ggcacaagga gttcaaggct aagggtgaag ctatgaataa 720
 tgccctgcaa cttcancctt gggtgacaag accaagaant tccaantca aattttttaa 780
 acgaa 785

<210> 4878

<211> 722

<212> DNA

<213> Homo sapiens

<400> 4878

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 tttctctctt tgttgtttaa ggtattaagc acgaattatt acatgagact ggcagatagc 180
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 cattgttttc tttaaactcg tcctcttaaa aagcttctta agagctcagt taatgctttt 300
 gacttaacta ggagaaaaag gcatgataat acaggcaaga tggcattggt agcaattctg 360
 gtagtggttt ggaatgaatc ctaagaggca gggatcttaa ggacaaggaa gagaagagag 420
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tgttctcaat tcattcatat tattaagctc ttcctgcagt tgatatctga gcagagtaag 540
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 ttgggcactg tggttttaag aatatctgag taaaataaca atatgannta ataaacagaa 660
 gctctaacgt caggtaacaa atagacagca agaaaggntt gcaccatcct cctaagggct 720
 aa 722

<210> 4879

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4879

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 caccgcaggc ccctggccac tgaaagagtg tgcagtggac tgtgggtctc ccatatgcgg 180
 tgccgccccaa aggtggcttt gcctcaagca acctaccctg atgttttact cattggaatg 240
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 tgaggttcct gctggggacc atgtgtggtt gtggcatgtg tgagcagaag ggaggatgag 480
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 tctaagccac tgaatcaagt gtatttcagg cttatttcaa cattccaatg ccctggtttt 600
 cctgcttgaa tctgttcgtg ggcaaagggt tgggggaatt tgtgaccctg gnacatcccc 660
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<210> 4880

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4880

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gctgcctacc acaaggactt tagcttactt tttaaagatt gaagaaaaaa aagaagacag 120
aaaaagaaga actcaaagat acacaaagta atttgaacca aggctcagaa gtttttggag 180
ccgtgaggga tacagcagtt tggtaaatat tgtcttaaca tgcttcaaataaatcagctt 240
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gcagtataaa gaaggctcag caggctgttg ccaataaagc ttigactgaa tctacgcttc 480
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caactgtggn actgaatggg cttgctatga aaaggggaga gcctgccatc tacagggcac 600
tagatccaaa gccattccca aattatagag ctaattacaa ctttcngggc aatgtacaat 660
cagaggtatc attgcccaat gcctaagatc ttttaagttc agcctcactg gtgggaaatt 720
aatggnantt ttttggggga aaggaaagna c 751

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<210> 4881

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4881

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tgtgggtttt tgtttttttt tttttttttt ttttggtcga gaactactaa tttcatgcta 120
tttctttctc tctccctttg ttgttatattg atttggggga agggagtgag gcttgtgcag 180
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cattcaaaag tgaacacact tggtagctga accatatctg agcagcgtga ttctgttgtc 300
ttgcataatg tattctctca ggctgtggat ctttggtaca gctctaggaa actgtagaaa 360
tacaatgcta ttagctttt ccaccccatg gtctctagt ctgcctatca acttgcctcc 420

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ttttttccca ataacctgtc ttccaggtgg tacagtttagc tgtcactcag ctgacaccat 480
 gatgtggcag cagagagggga aacctacaag tggtttgcct cattgccttt gccacatctg 540
 aagttctcan cagcactacc ttagacttca ggagctaata ggaaactttt tatgggtgtaa 600
 atgctgtaag actttgtaca tacttcagtt gttangaaat ccttanagaa aaaaagaaaa 660
 agttacgcta ataaattgct gtgggtgcaag gcactaatgg ggggtgggttc nccttg 716

<210> 4882

<211> 818

<212> DNA

<213> Homo sapiens

<400> 4882

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 taccgataaa acaagtgttg gtccaagtag tggaggaggt tttgtagatt ggactttacg 180
 tttaaacaca attcaatccg acaagttttt aaatttactc ttgagtatgg ttccagtgat 240
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 tcaactgcag tacagacttt tagtaataga tctgagcaac acatggagta tcacagtttc 360
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 gatgactatg ccaattgtaa ttactgtgat ggaagggaga cttcagaaac cactgccatg 480
 ttacaagatg aagatatatc tagtgatggg gatgaagatg ctattgtaga agtgacccca 540
 aaattaccaag aggaatccag tggcatcatg gcattgcaaa tacttgtgcc ctttttgcta 600
 gctgggttttg ggacagtttc agctggcatg gtactggata tagtacagca ctgggaggtg 660
 ttcagaaaag ttacaggagt tttcatttta ggccctgcac ttcctgggct caaagggaac 720
 nttggaaatt gcantgggat ccagattatc cactgcagta aattattggg aaaatggntt 780
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<210> 4883

<211> 816

<212> DNA

<213> Homo sapiens

<400> 4883

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gatgactatg tataatcaag ccacacagga aattgcaaaa ccttcagaac ttctaacaag 480
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aaccattaca agtctataca caaattggna ttggaaact ttgttacgac aagtcagcaa 660
tgggcatata gcatattttc ctgcaatgaa aagcgtttgt gaacttacct acagaaaatg 720
aattaacatt catgcaagag ggaatattct gacatatcag aaatgaggtc attatcanga 780
actactaagg nccatatggn attgaagttt ccaagt 816
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<210> 4884

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4884

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tatgccagac ctggcccttt gcagtgatat aaaatttttc ttgaggtgtc tggaaagatg 240
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gctgaatagg aacagctctg ctctgcagct cccagcgaga tcaacgcaga aggagataat 300
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 cagcccacag aaggcaagca gaagcagggt ggggtgtcgc ctcacccggg aagcgcaagg 420
 ggtcaggga ctcctcccc tagccaaggg aagctgtgag ggactgtgcc gtgaggaacg 480
 gggcattccg gcacagatac tatgctttcc ccacgggtctt tgcaaccac agaccaagga 540
 gattcccttg ggtgcctgca ccaccagggn cctgggtttc aagcaaaaaa ctgggcagcc 600
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<210> 4885

<211> 701

<212> DNA

<213> Homo sapiens

<400> 4885

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 ggacaagaga tatctgctaa agcagctaca tgttttgcag agaagttgcc ttctagcaac 180
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<210> 4886

<211> 790

<212> DNA

<213> Homo sapiens

<400> 4886

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gccatttagg agctctgctc aaagccagac gtatcctaga aggaaaacat caccatggct 180
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gcccagtgag gggcatgacg tggtcacata atgacatgtg gatgttgaca gcaagaccac 720
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cataangggg 790
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<210> 4887

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4887

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caatgcagaa atacccaaac cctatgaacc caagtgtggt tggagttgat gtgttgaca 180
gacatataga tccctctgga aagttgcaca gccacagact tctcagcaca gagtggggac 240
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 caaacatggt ttcagtagat gagagactta tatacaaacc acatcctcag gatccagaaa 420
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 ccataaggac tccaatggca gcagcagcgt ttgcagagaa gtgatcgtga cagttgggaa 660
 acaacatcgg gtactccaag gtctctcccn aactggacta anataattta atttggtaat 720
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<210> 4888

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4888

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 cacatggctc ctcttaact gcgtctgctc aacctccctc agccctgtga acagcatccc 180
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 catcggggga ctgctacctg ctctctgccc cggggcccca cgtcctgctt ctggggatca 660
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<210> 4889

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4889

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<210> 4890

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4890

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cactttcctt atttactgaa tgagtggagg gcagagacag gcctggagtt acgcacactg 300
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 ttaaaaatcc aaaattgcct atattccacc tgccaagcaa gaagatgctt tcattaatga 720
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<210> 4891

<211> 838

<212> DNA

<213> Homo sapiens

<400> 4891

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cgaagtggcc ttcaatttga tgttcccccg gtaatgaatc ccaatacacc ccaatggagg 780
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<210> 4892

<211> 729

<212> DNA

<213> Homo sapiens

<400> 4892

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cagacaagtt cagcatattt tagcatcagc cagtcccagt ggncggggcc actgtatggg 660
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<210> 4893

<211> 592

<212> DNA

<213> Homo sapiens

<400> 4893

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<210> 4894

<211> 756

<212> DNA

<213> Homo sapiens

<400> 4894

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atttataaat attatatgct cagaatcctt gattgataag agcatatgat taaaaaatga 600
aaacacattg tagagttatt catagtcaca tatggtatgt aactgaatat atatgatata 660
tataatataa ataaatatat ttaaaatata tatttatata taaatatgta ttatatataa 720

atatatatca tatattanan antaatataa ccaaatt

756

<210> 4895

<211> 716

<212> DNA

<213> Homo sapiens

<400> 4895

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 tgctttaacg tgacagctgc gtggaagaaa taatggttgg gcaaacactt ttctattgan 660
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<210> 4896

<211> 770

<212> DNA

<213> Homo sapiens

<400> 4896

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tctaatagga gatgtaacac tttatitcat ggcaggcttt tattgcagag acttgaagtc 180
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 tacattitgtg ctctctctct ctgtitititc ccttctcttt tccaagttaa gatnaagata 720
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<210> 4897

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4897

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 cgaagccatc gtcacactga ctcttggttg cacacaagtg aactcaatga tggctatgat 180
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 gaagaaaaca aacagtcttt gtgtataccg aggagaccaa actggaacca aaatactacc 420
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 aaccactcc tgtttaaatg tgaggatttg gaatgttatg tgaaagaaat ggatgcaata 660

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<210> 4898

<211> 742

<212> DNA

<213> Homo sapiens

<400> 4898

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tgtccacata aagtaagtcc aagggtatc atatggctaa aatcaagntt atttgggtca 660
accctggta tgtatttata aagtcaactt atcagccatt taagatggng atttgcntta 720
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<210> 4899

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4899

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 aaggagcgat tcttcatttt ggnacccttt ccttattttc tgggtaccat gagaaattgt 660
 agactttact cctanattcn ctttccaagc cctaaggatt aagccatttt tccaagaaaa 720
 tggttgcata ccattctgcc aatgaaagga ancaaaa 757

<210> 4900

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4900

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<210> 4901

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4901

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<210> 4902

<211> 609

<212> DNA

<213> Homo sapiens

<400> 4902

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aanttcccn 609
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<210> 4903

<211> 620

<212> DNA

<213> Homo sapiens

<400> 4903

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<210> 4904

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4904

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<210> 4905

<211> 828

<212> DNA

<213> Homo sapiens

<400> 4905

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 tattgtgaat caaagttcct ggatgaaaat tgggaattga aaatttctgg naaagatggg 780
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<210> 4906

<211> 702

<212> DNA

<213> Homo sapiens

<400> 4906

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